

Department of Education
AMERICAN PRINTING HOUSE FOR THE BLIND
Fiscal Year 2019 Budget Request

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For carrying out the Act to Promote the Education of the Blind¹ of March 3, 1879,

\$25,431,000.

NOTES

A full-year 2018 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Act, 2018 (Division D of P.L. 115–56, as amended). The amounts included for 2018 reflect the annualized level provided by the continuing resolution.

Each language provision that is followed by a footnote reference is explained in the Analysis of Language Provisions and Changes document that follows the appropriation language.

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Analysis of Language Provisions and Changes

Language Provision	Explanation
<u>¹...to Promote the Education of the Blind</u>	The name of the Act of March 3, 1879 is included to clarify the appropriation language reference.

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Appropriation, Adjustments, and Transfers
(dollars in thousands)

Appropriation/Adjustments/Transfers	2017	2018 Annualized CR	2019
Discretionary:			
Appropriation	\$25,431	0	\$25,431
Annualized CR (P.L. 115-56).....	<u>0</u>	<u>\$25,258</u>	<u>0</u>
Total, discretionary appropriation	25,431	25,258	25,431

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Authorizing Legislation
(dollars in thousands)

Activity	2018 Authorized	2018 Annualized CR	2019 Authorized	2019 Request
The Act to Promote the Education of the Blind (20 U.S. C. 101 et. seq.)	<u>Indefinite</u>	<u>\$25,258</u>	<u>Indefinite</u>	<u>\$25,431</u>
Total annual appropriation		25,258		25,431

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Appropriations History (dollars in thousands)

Year	Budget Estimate to Congress	House Allowance	Senate Allowance	Appropriation
2010	\$22,599	\$22,599	\$24,600 ¹	\$24,600
2011	24,600	24,600 ²	24,600 ¹	24,600 ³
2012	24,600	24,551 ⁴	24,551 ⁴	24,505
2013	24,505	24,505 ⁵	24,508 ⁵	23,223
2014	24,505	N/A ⁶	24,456 ¹	24,456
2015	24,456	N/A ⁶	25,000 ⁷	24,931
2016	24,931	25,431	24,931	25,431 ⁸
2017	25,431	25,431 ⁹	25,431 ⁹	25,431 ⁹
2018	25,383	26,431 ¹⁰	25,431 ¹⁰	25,258 ¹⁰
2019	25,431			

¹ The levels for the Senate allowance reflect Committee action only.

² The levels for the House allowance reflect the House-passed full-year continuing resolution.

³ The level for appropriation reflects the Department of Defense and Full-Year Continuing Appropriations Act, 2011 (P.L. 112-10).

⁴ The level for the House allowance reflects an introduced bill and the level for the Senate allowance reflects Senate Committee action only.

⁵ The level for the House and Senate allowances reflect action on the regular annual 2013 appropriations bill, which proceeded in the 112th Congress only through the House Subcommittee and the Senate Committee.

⁶ The House allowance is shown as N/A because there was no Subcommittee action.

⁷ The level for the Senate allowance reflects Senate Subcommittee action only.

⁸ The levels for House and Senate allowances reflect action on the regular annual 2016 appropriation bill, which proceeded in the 114th Congress only through the House Committee and Senate Committee.

⁹ The levels for House and Senate allowances reflect Committee action on the regular annual 2017 appropriation bill; the Appropriation reflects the Consolidated Appropriations Act, 2017.

¹⁰ The levels for the House reflect floor action on an Omnibus appropriation bill; Senate allowances reflect Committee action on the regular annual 2018 appropriations bill; the Appropriation reflects the annualized Continuing Resolution level.

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American Printing House for the Blind

(Act to Promote the Education of the Blind, 20 U.S.C. 101 et seq.)

(dollars in thousands)

FY 2019 Authorization: Indefinite

Budget Authority:

<u>2018</u> <u>Annualized CR</u>	<u>2019</u>	<u>Change from</u> <u>Annualized CR</u>
\$25,258	\$25,431	+\$173

PROGRAM DESCRIPTION

The Act to Promote the Education of the Blind authorizes an annual appropriation for the American Printing House (APH) for the Blind to produce and distribute educational materials adapted for students who are legally blind and enrolled in formal educational programs below the college level. The APH, located in Louisville, Kentucky, has received Federal support under this Act since 1879. Materials produced by APH include textbooks in braille and large type, educational tools such as braille typewriters and computer software and hardware, teaching aides, including tests and performance assessments, and other special supplies. State educational agencies and programs serving persons who are blind may order materials free of charge up to the amount of funds allocated to each State for educational materials. Approximately 75 percent of the appropriation is used to cover the cost of producing these educational materials. The APH uses the remainder of the appropriated funds to conduct research related to developing and improving products and to provide advisory services to professional and consumer organizations.

The APH conducts research necessary to develop and improve educational materials in core curriculum areas such as science, mathematics, English language arts, and social studies and adapts testing materials related to these subject areas. APH also conducts research in product areas related to the unique needs of the visually impaired population, such as braille reading, orientation and mobility, and assistive technology. Special materials in areas such as early intervention and early childhood education, prevocational training, and the functional use of residual vision are also developed for use in teaching students who are blind or have additional disabilities.

Advisory services provided by the APH include: administration of the Student Registration System, Louis Database of Accessible Materials, Electronic File Repository and Expert Database; National Instructional Partnership activities; production of catalogs, brochures, videos, and a wide variety of web-based information. APH also convenes expert advisory committees and focus groups to address specific issues, as necessary.

APH materials are distributed to programs serving blind students through allotments of funds to the States. These allotments are based on an annual census (conducted by APH) of the number of legally blind students located in each State, and are provided in the form of credits.

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Trustees may use the credits to order materials from APH. These materials are available for purchase by the trustees and the general public at <http://shop.aph.org>. Trustees are responsible for the administration of the Federal accounts in each State. APH materials are reviewed by a six-member Educational Products Advisory Committee. The purpose of this committee, made up of ex officio trustees, is to ensure that all educational materials produced and research undertaken by APH effectively focus on meeting the needs of students who are blind. In addition, a second five-member advisory committee of ex officio trustees, the Educational Services Advisory Committee, provides oversight and accountability regarding APH's outreach and support services.

Materials provided through the APH appropriation supplement the various other resources available to the States to achieve this goal. For example, the Individuals with Disabilities Education Act (IDEA), requires States to provide a free appropriate public education, including appropriate related materials and supplies, to all students with disabilities. In order to meet their responsibilities under the IDEA, many States make additional purchases from APH and other suppliers of materials for students who are visually impaired.

In fiscal year 2017, Federal funding provided through the APH appropriation for educational materials represented approximately 70 percent of APH's total sales income, and approximately 64 percent of APH's total budget of \$39.4 million. Federal grants and contracts from agencies such as the National Library Service for the Blind, Social Security Administration, and Veterans Administration represented 7 percent of APH's total budget. The remaining 29 percent of APH's budget came from nongovernmental contracts and revenue generated from the sale of unsubsidized products to State and local agencies, direct sales to individuals who are blind, private sector contract sales, corporate and individual donations from the private sector, and interest income from endowments and other investments.

Funding levels for the past 5 fiscal years were:

Fiscal Year	(dollars in thousands)
2014	\$24,456
2015	24,931
2016	25,431
2017	25,431
2018	25,258

FY 2019 BUDGET REQUEST

The Administration requests \$25.4 million for fiscal year 2019 for the American Printing House (APH) for the Blind, an increase of \$173 thousand, to restore funding to the fiscal year 2017 level. APH provides crucial educational aids at no cost to students who are visually impaired. The materials that are developed, manufactured, and distributed by the APH offer States an additional resource to help provide a free appropriate public education to visually impaired students, as required by the Individuals with Disabilities Education Act (IDEA). Federal support of the APH also helps ensure that students who are visually impaired receive the accessible educational materials they need to succeed in school and prepare for college and careers. The Administration believes the request provides sufficient resources to support an adequate level of

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service in each of the three program areas: educational materials, advisory services, and research.

Educational Materials: The request includes \$19 million for educational materials. The requested funding would provide an estimated \$294 per eligible student. Materials produced by APH include textbooks in braille, large type, and audio recording formats; educational aides such as braille typewriters, raised (tactile) graphics, and computer software and hardware; teaching tools such as tests and performance measures; and other special supplies. APH manufactures these instructional materials for a broad range of academic subjects and grade levels. In fiscal year 2016, 1,005 distinct educational products were available for purchase with Federal Quota funds. The Quota consists of funds from the APH appropriation (about 75 percent) in the form of credits that are allocated to States on the basis of the annual census of blind students in each State.

The timely delivery of textbooks in accessible media formats for braille-reading students is crucial to ensuring that children who are visually impaired have the same access to a free appropriate public education as children without disabilities. In order to address this need, each year APH produces thousands of braille and large print textbooks on demand, including instructional materials featuring tactile graphics. APH issues industry standards for tactile graphics, manufactures and distributes graphics to students across the country, and maintains a Tactile Graphic Image Library in order to increase the variety and lower the cost of pictures and graphics included in accessible educational materials. Tactile graphics are essential for teaching subjects such as geography and geometry. The funds requested for educational materials support APH's production of teaching modules and associated instructional materials in these subjects.

Advisory Services: The request includes \$1.55 million for advisory services for fiscal year 2019. Through advisory services, APH provides a variety of activities that support the administration of the educational materials program. These funds support activities such as the annual meeting of the ex officio trustees; advisory group panels; the annual census of students who are visually impaired; printing and distribution of catalogs of available materials; and field services such as consultation, in-service training, webinars, and workshops. Advisory service funds also support the provision of ongoing consumer information and technical support to customers. APH also uses these funds to provide support and information to staff and teachers at schools around the country.

In order to maximize the availability of ongoing training and technical assistance activities, APH frequently conducts training through the Internet. These web-based training sessions help APH reach a wide audience in an efficient, low-cost manner.

Projects that would continue to be funded in fiscal year 2019 include:

- National Instructional Partnerships program, webcast product training series (see: <http://www.aph.org/videos/>),
- APH Research Library (see: <http://migel.aph.org/catalog/CategoryInfo.aspx?cid=152>),
- APH Accessible Media Producers Database (see: <http://louis.aph.org/catalog/CategoryInfo.aspx?cid=152&master=AMP>), and the
- National Instructional Partnership with Teacher Training Programs (see: <http://www.aph.org/advisory/initiatives/#nip>).

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The APH website offers the public convenient access to products, manuals, downloadable catalogs and newsletters, information on training events, online surveys, and online reference services such as the Louis Accessible Materials Database and APH file repository. In recent years, APH has integrated these unique databases and online tools to make them cross-searchable and to enhance user-friendliness. The APH website provides a comprehensive source of specialized information and resources on accessible instructional materials for individuals who are visually impaired.

Research and Product Development: The request includes \$4.9 million for research and product development, the same amount that was allocated for research at the fiscal year 2017 level. APH undertakes applied and developmental research with the goal of developing innovative educational products for students who are visually impaired. Major research initiatives include the *APH SMART Braille by Perkins*, which is an electronic braille that provides the user immediate feedback through text-to-speech, and a screen that displays SimBraille and large print of what is brailled. There is an audio and visual component that provides access to non-braille users. APH has also partnered with Orbit Research® and Texas Instruments® to create the *Orion TI-84 Plus Talking Graphing Calculator*. The modified TI-84 Plus has attachments that add accessibility controls allowing the student to participate fully in STEM-related academics. A calculator to assist younger students is currently in development. These new products represent major improvements over existing tools and technologies. APH also continues to invest in the development of the file formats, software, hardware, and production infrastructure necessary to produce and deliver braille books through electronic files and e-readers rather than through paper books (see: <http://www.aph.org/research/>).

The Administration recognizes the need for APH to conduct developmental and applied research, so that it can continue to meet the changing needs of students who are visually impaired, particularly as the technologies for producing accessible educational materials evolve rapidly. The request will provide funds for APH to conduct over 350 research projects in a wide range of content areas, including development of new products for use with infants, toddlers, and preschoolers who are visually impaired, materials for students who are visually impaired with secondary disabilities, equipment to assist students with low vision, materials for braille literacy, classroom learning aids, tactile graphics, and tools to aid in the transition from school to postsecondary educational or job settings.

Product development activities planned for fiscal year 2019 are categorized into 12 content areas: Adult Life, Braille, Core Curriculum, Cortical Visual Impairment, Early Childhood, Emergent Literacy, Low Vision, Multiple Disabilities, STEM (Science, Technology, Engineering and Math), Tactile Graphics, Technology, and Tests and Assessments.

The request also includes funding for APH's Accessible Tests Department initiative (see: <http://www.aph.org/tests-and-textbooks/>). Goals of this initiative include:

- Providing tests, practice tests, examination administration manuals, and other assessment related materials, including color, large print assessments, in high quality accessible media.
- Promoting inclusion of visually impaired individuals in the development of assessments.
- Enhancing the test performance of visually impaired individuals through research, education, and communication.

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PROGRAM OUTPUT MEASURES
(dollars in thousands)

Output Measures

	<u>2017</u>	<u>2018</u>	<u>2019</u>
Distribution of funding:			
Educational materials	\$19,256	\$18,845	\$19,006
Advisory services	\$1,500	\$1,547	\$1,550
Educational and technical research	<u>\$4,675</u>	<u>\$4,866</u>	<u>\$4,875</u>
Total	\$25,431	\$25,258	\$25,431
Number of eligible students	63,357	63,944	64,634
Average per student allotment (whole dollars)	\$304	\$295	\$294
Number of services and products provided:			
Products available with Federal funds	1,000	1,000	1,000
Advisory committee meetings	5	5	5
State educational agencies visited	12	12	12
Residential programs visited	12	14	14
Rehabilitation programs visited	10	12	12
In-service training programs and webcasts	25	25	27
Product training presentations and exhibits	125	125	125
Visits to Ex Officio Trustees	20	25	30
Total employees (full-time equiv.)	305	305	305

PROGRAM PERFORMANCE INFORMATION

Performance Measures

This section presents selected program performance information, including, for example, GPRA goals, objectives, measures, performance targets and data; and an assessment of the progress made toward achieving program results. Achievement of program results is based on the cumulative effect of the resources provided in previous years and those requested in fiscal year 2019 and future years, as well as the resources and efforts invested by those served by this program.

Goal: Pre-college level blind students will receive appropriate educational materials that result in improved educational outcomes.

Objective: *Appropriate, timely, high-quality educational materials are provided to pre-college level blind students to allow them to benefit more fully from their educational programs.*

Measure: The percentage of American Printing House for the Blind trustees, advisory committee members, consumers, and teachers who agree that the educational materials provided through the Act are appropriate, timely, and high-quality.

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Trustees - Percentage who agree:

Year	Target	Actual Extremely Mostly Somewhat	Extremely Satisfied	Mostly Satisfied	Detail Somewhat Satisfied	Not too Satisfied	Not at all Satisfied
2014	98%	98%	61%	35%	2%	0	0
2015	98	99	61	34	4	0	0
2016	98	98	75	20	3	2%	0
2017	98	100	67	32	1	0	0
2018	98						
2019	98						

Advisory Committee Members - Percentage who agree:

Year	Target	Actual Extremely Mostly Somewhat	Extremely Satisfied	Mostly Satisfied	Detail Somewhat Satisfied	Not too Satisfied	Not at all Satisfied
2014	100%	100%	63%	33%	3%	0	0
2015	100	100	66	33	0	0	0
2016	100	100	91	9	0	0	0
2017	100	100	71	29	0	0	0
2018	100						
2019	100						

Consumers - Percentage who agree:

Year	Target	Actual Extremely Mostly Somewhat	Extremely Satisfied	Mostly Satisfied	Detail Somewhat Satisfied	Not too Satisfied	Not at all Satisfied
2014	96%	99%	61%	33%	2%	1%	0
2015	96	98	50	41	7	0	0
2016	96	100	45	55	0	0	0
2017	96	98	59	34	5	2	1%
2018	96						
2019	96						

Note: Percentages may not add to 100 percent due to rounding.

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Teachers - Percentage who agree:

Year	Target	Actual Extremely Mostly Somewhat	Extremely Satisfied	Mostly Satisfied	Detail Somewhat Satisfied	Not too Satisfied	Not at all Satisfied
2014	97%	99%	56%	37%	6%	1%	0
2015	97	99	57	38	5	0	0
2016	97	97	58	36	3	1	0
2017	97	99	59	34	5	1	0
2018	97						
2019	97						

Note: Percentages may not add to 100 percent due to rounding.

Additional Information: In 2017, data were collected using a survey instrument designed to measure the levels of consumer satisfaction specified in the objective. The individual factors were each rated on a separate 5-point Likert scale, with 5 representing the highest level of satisfaction. APH conducted surveys of the four groups of constituencies cited in the APH GPRA plan for 2017. These groups are: (1) Ex Officio Trustees of APH who are professionals in the field of blindness; (2) APH advisory committees; (3) other consumers of APH products; and (4) teachers of students who are visually impaired.

The percentages shown for each measure are composed of the respondents from each group that were “Extremely satisfied,” “Mostly satisfied,” or “Somewhat satisfied” with all three dimensions of product satisfaction (quality, timeliness, and appropriateness for targeted audience).

The survey instrument was distributed electronically to 143 current Ex Officio Trustees of APH, as well as to various professional groups whose members work in the field of blindness and to other consumers of APH products. In addition, the survey was available on the APH website. This made it easily available for response by individuals who were not on a specific mailing list, but who were encouraged to respond through invitations on list serves and in various newsletters and announcements. The web-based format also provides accessibility to visually impaired individuals who require alternate media.

There were 492 valid respondents to the 2017 survey, representing a substantial increase from the 194 respondents in 2015 and the 366 respondents in 2016. The subsets of that total are: (1) 39 Ex Officio Trustees, including 7 advisory committee members; (3) 355 teachers; and (4) 98 other consumers.

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Objective: To improve the quality of APH research and product usefulness.

Measure: The percentage of APH product sales revenue that is from new products.

Year	Target	Actual
2014	22%	40%
2015	22	18
2016	22	16
2017	22	17
2018	22	
2019	22	

Additional Information: This measure was developed to help determine the efficacy of new products developed by APH. The purpose of the measure is to evaluate the reaction of consumers to new products created by the research department, which is determined by measuring the extent to which sales of new products surpass a minimum level of products sold. For FY 2017, a total of \$2.5 million new products (defined as products introduced in FY 2015 and FY 2016) were sold. Total product Sales for FY 2017 was \$14.9 million. New products included the Video Mag HD, Jaws Magic Student Subscription, and Mini Read Write Stand.

Measure: The average rating, according to approved criteria on relevance, for a sample of new American Printing House for the Blind products evaluated by an independent panel of qualified experts or individuals with appropriate expertise related to the target audience.

Year	Target	Actual
2014	4	5.5
2015	4	5.8
2016	4	6.0
2017	4	6.1
2018	4	
2019	4	

Additional Information: To determine the average relevance rating, a panel of experts, who are proposed by APH and approved by the Department, reviews a random sample of new products developed each year by the Printing House to assess whether: (1) there is evidence of need for the product; (2) there is evidence that APH sought the opinions of knowledgeable individuals on the need for the product; (3) APH made the decision to produce the product based on a standardized process for product selection; (4) the product addresses an identified need for individuals who are visually impaired; and (5) the product is fully accessible for the intended population. The products are rated using a 7-point rating scale, where 1 equals “does not meet criteria, 4 equals “meets criteria,” and 7 equals “exceeds criteria.” The average of the scores is the number reported in the actual column. In fiscal 2017, the panel’s average rating increased from the prior year and continued to exceed the “meets criteria” rating. The small variations in the average score from year to year may reflect the changing composition of the expert review panel and the sample of the products rated.

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Panel members reviewed and rated 10 APH products for FY 2017: (1) O&M for Wheelchair Users; (2) Gross Motor Development Curriculum; (3) Color-by-Texture Marking Mats; (4) Interactive US Map w/Talking Tactile Pen; (5) Teaching Street Crossings; (6) Light in Sight; (7) Tactile Compass for Math and Art; (8) Video Mag HD; (9) Tactile Editing Kit; and (10) VIPS @ Home Series. These products, which are representative of the wide variety of products produced by APH, were purposefully selected by APH for review by the expert panel.

Measure: The average rating, according to approved criteria on quality of research, for a sample of new American Printing House for the Blind products evaluated by an independent panel of qualified experts or individuals with appropriate expertise related to the target audience.

Year	Target	Actual
2014	4	5.3
2015	4	5.4
2016	4	5.6
2017	4	6.1
2018	4	
2019	4	

Additional Information: The panel of experts annually reviews a purposefully selected sample of new products developed each year by APH to assess whether: (1) appropriate research methodologies are being used consistent with the type of product being developed; (2) sufficient supporting information and evidence is collected by research data methods; (3) data are gathered from a geographically diverse U.S. population and a variety of potential user groups; (4) evaluation data are gathered from appropriately qualified individuals; (5) research data are gathered from an adequate number of sources; (6) development demonstrates use of field-reviewed data for modification to the product prior to final development; and (7) data are gathered on student and consumer outcomes related to the use of the proposed product. The products are rated using a 7-point rating scale, where 1 equals “does not meet criteria, 4 equals “meets criteria,” and 7 equals “exceeds criteria.” The mean of the scores is the number reported.

Panel members reviewed and rated 10 APH products for FY 2017: (1) O&M for Wheelchair Users; (2) Gross Motor Development Curriculum; (3) Color-by-Texture Marking Mats; (4) Interactive US Map w/Talking Tactile Pen; (5) Teaching Street Crossings; (6) Light in Sight; (7) Tactile Compass for Math and Art; (8) Video Mag HD; (9) Tactile Editing Kit; and (10) VIPS @ Home Series. These products, which are representative of the wide variety of products produced by APH, were purposefully selected by APH for review by the expert panel.

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Measure: The average rating, according to approved criteria on utility, for a sample of new American Printing House for the Blind products evaluated by an independent panel of qualified experts or individuals with appropriate expertise related to the target audience.

Year	Target	Actual
2014	4	5.5
2015	4	6.0
2016	4	6.1
2017	4	6.2
2018	4	
2019	4	

Additional Information: For this measure, the panel of experts annually reviews a purposefully selected sample of new products developed each year by APH to assess whether: (1) sales of the new products indicate demand; (2) new product indicators, such as field evaluations and other feedback, substantiate that the new product is meeting a need; and (3) the products are considered highly useful for individuals with visual impairments. The products are rated using a 7-point rating scale, where 1 equals “does not meet criteria, 4 equals “meets criteria,” and 7 equals “exceeds criteria.” In fiscal 2017, the average rating continued to increase and the target “meets criteria” rating was once again exceeded.

Efficiency Measures

The Department worked closely with the Printing House to develop appropriate efficiency measures for the Federal program at APH.

Measure: The cost per page to produce color large type textbooks.

Year	Target	Actual
2014	\$0.12	\$0.08
2015	0.10	0.09
2016	0.10	0.08
2017	0.10	0.09
2018	0.10	
2019	0.10	

Additional Information: There are three variables used in calculating the cost per page for both the production of color large type and braille textbooks. These three variables are: (1) the actual cost of manufacturing the pages; (2) the total number of pages produced annually; and (3) the average number of pages per volume. Factors that can affect these variables include the costs of raw materials and equipment, demand for products, and efficiency of operations.

In fiscal year 2017, APH printed 7,748,220 pages of color large print type textbooks at a cost of \$1,440,000. For fiscal year 2017, the total number of large type color pages produced increased by 802,000 or 11.5 percent, and the number of volumes increased by 4,000 or 2.1 percent when compared to fiscal year 2016. Total production expenses increased by \$180,000 or

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14.3 percent. As a result, cost per page increased by 1.5 cents or 19.5 percent from 7.6 cents per page to 9.1 cents per page, which was favorable to the target of 10 cents per page.

Measure: The cost per page to produce braille textbooks.

Year	Target	Actual
2014	\$0.10	\$0.17
2015	0.15	0.15
2016	0.15	0.14
2017	0.15	0.22
2018	0.15	
2019	0.15	

Additional Information: In FY 2017, the total number of braille textbook pages decreased by 2.8 million or 35.9 percent and the number of volumes decreased by 19,000 or 23.7 percent, compared to FY 2016. Total production expenses decreased by \$131,000 or 10.1 percent. As a result, the total cost to produce braille textbooks increased by 8.4 cents or 60 percent from 13.9 cents per page to 22.3 cents per page, which was unfavorable to the target of 15 cents. (APH printed 4,961,000 pages of braille textbooks at a cost of \$1,170,000 in FY 2017.)