



Facts About Ballot Printing Costs

By Marge Acosta, New Yorkers for Verified Voting
July 18, 2007

The most frequently expressed concerns cited by New York State election commissioners and legislators about the Paper Ballot Optical Scan (PBOS) System are (1) the cost of ballots, (2) lack of assurance that ballots will be delivered as promised, and (3) worries about getting ballots printed on time when last minute changes are necessary. To answer these concerns, [New Yorkers for Verified Voting](#) has updated its research into ballot costs as well as possible alternative arrangements for printing.

Objections to Our Data on the Cost of Paper Ballots

We stated in our 2005 report, "[Paper Ballot Costs and Printing](#),"¹ that there are over 250 printing companies in the US that supply scannable ballots. We included an estimate from an Ohio company, [Dayton Legal Blank](#), at 29¢ each for a Schenectady County ballot. We also offered details on some required specifications for printing scannable ballots.

Nevertheless, some continue to quote exorbitant ballot prices, arguing that ballots must be in a horizontal format; that the State mandates the use of certain printing companies; that excessive numbers of printed ballots are required. But nothing in New York State's election law supports these claims. At other times vendors claim that New York's unique mandate for a full-face ballot necessitates charging higher prices. Some commissioners also see paper ballots as unworkable because some counties need to provide ballots in multiple languages.

Answering the Objections: Estimates from Printing Companies

First, with PBOS systems, poll site voters would have ballot-marking devices to translate English ballots into various languages, so jurisdictions that are not required to have multiple language ballots available at the poll site can meet HAVA language requirements without printing additional ballots. In jurisdictions where multiple language ballots are required, ballots combining three languages (such as the [New York City sample](#) used in this report) can be used to consolidate multiple languages on a single ballot face.

Secondly, provisional, emergency and absentee ballots must be printed in all jurisdictions, no matter which voting system is utilized. *Ballot printing costs are incurred no matter which system is used, DRE or scanner.* However, in optical scan jurisdictions these ballots are the same as the poll site ballots for each election district. A printing maxim is that higher volume brings lower prices; the cost per ballot in PBOS counties will be lower than in counties using DREs.

As this report will demonstrate, whether printing single or multiple-language ballots, New Yorkers for Verified Voting has found that high prices are not necessary.

Our procedure for obtaining ballot costs

After verifying that it complies with current New York State election law as stated below,² we used a New York City absentee ballot from the November 8, 2005³ election as a sample from which to obtain

¹ New Yorkers for Verified Voting, "Paper Ballot Costs and Printing," 2005
<http://nyvv.org/reports/PaperBallotPrintingCosts.pdf>

² State of New York 2006 Election Law, Section 7-104, 4b: The titles of offices may be arranged horizontally, with the names of candidates for an office and the slot or device for write-in ballots for such office arranged vertically under the title of the office, or the titles of offices may be arranged vertically, with the names of candidates for an office and the slot or device for write-in ballots for such office arranged horizontally opposite the title of the office.

³ See [Appendix B](#) for a downloadable image of the New York City ballot.

several estimates. This ballot was chosen because the races and directions are written in three different languages – English, Spanish and Chinese – on one single ballot. The sample ballot we used has several long proposals, and uses a vertical format on one side and landscape on the other. It was converted from 8.75 x 14 inches to 8.5 x 14 inches to accommodate all optical scanners submitted for New York State certification.

Using this sample, we requested estimates from printing companies, giving specifications for two jurisdictions: Suffolk County, at 1 million ballots with 1047 different ballot styles, and New York City, at 4 million ballots with about 6000 different ballot styles. Since local races vary, each election district (ED) may require a different ballot style.

In our conversations with machine vendors and printers, we learned that each vendor recommends ballots of a certain thickness or paper weight, ranging from 60 to 110-pound text paper, for its scanner. Therefore, we specified an average 80-pound text paper for the quote. Additionally we asked that the cost of a perforated, numbered stub for each ballot, as required by New York, be included.

Ballot cost estimates

The estimates returned by two of the printing companies were:

- **Dayton Legal Blank quoted 29¢ per ballot using Suffolk’s requirements.** They gave an average price of 32¢ per ballot for other counties, depending on the variation and number of ballots being ordered.
- **Print Comm quoted 14¢ per ballot for Suffolk County and 15.5¢ per ballot for New York City.** Costs for shipping and handling are additional.

The formal estimates we received from these firms are in the [Appendix A](#).

An Alternative: In-House Printing Using County Owned Digital Printers

An alternative to purchasing printed ballots is the use of in-house, county or regional printers that print scannable ballots. Such printers would not only lower ballot printing costs, they would also put the control of printing ballots with last minute ballot changes in the hands of local election boards.

New Yorkers for Verified Voting has found that two types of in-house printers, digital and ballot-on-demand, are presently in use by some optical scan counties. In our research, the counties using ballot-on-demand printers either had relatively small numbers of registered voters or were utilizing the printers only for specific applications, such as provisional ballots or early voting. Also, it has been reported that with more extensive use ballots from these printers are problematic when scanning. Therefore we focused on digital printers.

Currently, several manufacturers of digital printers are targeting the ballot market. Some are offering different models of basically the identical digital printer using a Heidelberg engine. These printers have the speed and quality required for printing numerous scannable ballots. Two models presently used for ballot printing are [Kodak’s DigiMaster](#)⁴ and [Canon’s imageRUNNER](#).⁵ While ES&S has approved both models for use with its optical scanner, printer vendors have said the printers may be used in conjunction with any optical scanner.

Both the DigiMaster and imageRUNNER are capable of printing from 55 to 75 two-sided ballots per minute, depending on the model utilized. Both also have the capacity to print ballots up to 14.33" x 18.5" in size and from 16lb. bond to 150lb. index in thickness. We obtained copies of the New York City

⁴ KODAK DIGIMASTER EX Production Systems

http://graphics.kodak.com/us/product/printers_presses/production_black_white/digimaster_ex/default.htm

⁵ Canon Digital Presses imageRUNNER Pro 7150VP

<http://www.usa.canon.com/opd/controller?act=OPDModelDetailAct&fcateoryid=2469&modelid=14570>

ballot cited above which were printed on a DigiMaster using 80lb and 110lb weight paper with a one inch perforated stub. NYVV was told the cost of the actual printing is about 1¢ per ballot.⁶

This is confirmed by Nebraska's Douglas County Commissioner Dave Phipps who told us, of the 9¢ it cost to print a ballot on the DigiMaster press, 8¢ of the cost was for the paper purchased from ES&S.⁷ *Phipps, who previously purchased preprinted ballots from ES&S at 25¢ each for a two-sided 8.5" x 14" ballot, estimated that even at 9¢ a ballot, the digital printer would pay for itself in two elections.* Douglas County has about 300,000 registered voters.

DigiMaster and imageRUNNER both have accessories for perforations and roll feeding, and non-perforated paper costs less than perforated paper. However, printer and paper companies have told us that it may be more convenient and almost as economical to purchase pre-perforated sheets of paper at the size needed by counties for current elections. Counties can explore which option is more suitable for their needs.

Ballot cost estimates for in-house printing

With this in mind, we obtained a price quote for the 8.5" x 15" 110lb index paper with a pre-perforated one-inch stub that would accommodate printing the New York City ballot. *The cost of the paper, shrink-wrapped, in cartons shipped to Suffolk County was 4.6¢ a sheet, making the cost of printing the NYC ballot in-house under 6¢ a ballot.*⁸

There is an existing New York State contract for four models of the Kodak's DigiMaster, setting the price for the smallest, 110 images-per-minute printers at about \$125,000 and the largest, 150 images-per-minute printers at approximately \$215,000.

New York State Board of Election officials have said that HAVA funds may be used to purchase these printers if they meet New York State requirements. Large jurisdictions, like New York City, may want to use more than one printer while small, adjacent counties could combine funds to purchase a "regional" printer.

Other Benefits of in-house printing

Although cost may be the primary reason for utilizing in-house printing, Boards of Elections cite voting deadlines as another important factor. Douglas County had costly delays when absentee ballots from ES&S arrived later than promised, and, with the advent of no-excuse absentee voting in Ohio's Summit County, officials there expressed concern for similar problems. Commissioner Phipps has found both issues are resolved by in-house printing.⁹

While maintenance costs of DRE systems are on the rise,^{10 11 12} NYVV has found that annual expenses for optical scan ballots are declining. With more and more counties around the country using or adopting ballot scanning systems, printing companies and printer vendors are increasingly entering the market for ballot production, decreasing the prices and giving one more reason for counties to choose paper ballots and precinct based optical scan systems.

⁶ Brian Price, Danka Office Imaging, 90 Park Avenue New York, New York 10016

⁷ Dave Phipps, Election Commissioner, Douglas County, Nebraska

⁸ Hudson Valley Paper Company, 981 Broadway Albany, NY 12207

⁹ "Summit ponders printing ballots," Lisa A. Abraham, 1/3/2007
<http://www.wheresthepaper.org/AkronBeaconJournal061210SummitPondersPrintingBallots.htm>

¹⁰ John Gideon, "New Voting Machines: The Gift That Keeps On Costing,"
http://votetrustusa.org/index.php?option=com_content&task=view&id=2108&Itemid=113

¹¹ Terry Oblander and Angela Townsend, "Special elections cost whether taxes pass. Charges for touch-screen machines going up",
<http://wheresthepaper.org/PlainDealer070113ChargesForTouchScreensGoingUp.htm>

¹² Mary Beth Lane, "Voting Machine Support Costly"
<http://www.columbusdispatch.com/?story=dispatch/2006/03/05/20060305-C1-00.html>

Appendix A – Ballot Cost Quotes from Dayton Legal Blank and PrintComm

Appendix A, Dayton Legal Blank, Quote 1

DLB. 0. 2000 01:20MM 937 435-8352

NO. 6815 P. 1



Toll Free (800) 262-8480
Office (937) 435-4405
Fax (937) 435-8352

Dayton Legal Blank Inc.
P.O. Box 750788 Dayton, Ohio 45475-0788

QUOTATION

Date: 08/31/2006
To: Marge Acosta
Customer Name: New Yorker's for Verified Voting

Quantity	Description	Unit Price	Total
1	8 1/2 x 14" M100 (ES&S) or AccuVote (Diebold) optical scan ballots, printed on both sides, with numbered stubs.	\$0.3200 per 1	\$0.00
Subtotal			\$0.00
Estimated Freight			\$0.00
Total			\$0.00

The price range for 14" ballots can be anywhere from .23/ea to .40/ea depending on the complexity and variation of the election and the number of ballots being ordered. We feel that .32/ea tends to be the mean average.

By: Dave Keeler

Dayton Legal Blank cost estimate for valid New York State optical scan ballot based on provided New York City absentee ballot from the 11/8/05 election.

Appendix A, Dayton Legal Blank, Quote 2

09/08/2006 10:02AM 937 435-8352

NO. 6829 P. 1/1



Toll Free (800) 262-8480
Office (937) 435-4405
Fax (937) 435-8352

Dayton Legal Blank Inc.

P.O. Box 750788 Dayton, Ohio 45475-0788

QUOTATION

Date: 09/08/2006
To: Marge Acosta
Customer Name: New Yorker's for Verified Voting

Quantity	Description	Unit Price	Total
1,000,000	8 1/2 x 14 Optical Scan ballots with multiple colors on 80# paper. 1,047 styles, with numbered stubs, packaged by precinct	\$0.3300 per 1	\$330000.00
1,000,000	8 1/2 x 14 Optical Scan ballots, black ink only on 80# paper. 1,047 styles, with numbered stubs, packaged by precinct	\$0.2900 per 1	\$290000.00
Subtotal			\$0.00
Estimated Freight			\$0.00

The above prices should be used for budgetary purposes only and should not be construed as an actual offer.

By: Dave Keeler

Dayton Legal Blank cost estimate for 1,000,000 Suffolk County ballots based on provided New York City absentee ballot from the 11/8/05 election. Top quote is for multiple color ballots and bottom quote is for black and white ballots.

Appendix A, PrintComm Quote



PrintComm
A Print Communications Company

December 12, 2006
Marge Acosta
New Yorker's for Verified Voting

E S & S - M100 ballot on 80# certified offset and Accuvote ballot.
The size is 8 1/2 x 14 with a 1" stub (top or bottom).
Printed two (2) sides.

1,000,000 Ballots with 1047 Styles - \$.1418 each.
4,000,000 Ballots with 6000 Styles - \$.1553 each.

From PDF files supplied by customer to PrintComm's specifications.

Thank you,

Jerry Minarik
810-239-5763 x 121

2929 Davison Road
Flint, MI 48506
(810) 239-5763
(800) 935-1592
Fax (810) 239-2231

**PrintComm cost estimate for 1,000,000 Suffolk County ballots
and 4,000,000 New York City Ballots
based on provided New York City absentee ballot from the 11/8/05 election.
Top quote is for multiple Suffolk ballots and bottom quote is for New York City ballots.**

Appendix B – New York City November 2005 Sample Ballot

Click the icon to download a PDF file of the front and back of the New York City November 2005 ballot used for the cost estimates given in Appendix A. The file can take a considerable time to download with a dial-up connection.



[New York City 2005 Absentee Ballot Image](#)
(Size – 3.9 Mb)