The following supplementary material accompanies the article "Reverse Engineering College Rankings," by Tim Chartier and Justin Peachey (Math Horizons, November 2014, pp. 5-7).

The weights obtained from the least-squares method (the components of the vector $\mathbf{w}$ in the article) are given below.

Academic reputation: 0.4712
Selectivity rank: 0.2277
25 th and 75 th percentile SAT scores: 0.011
Percentage of freshmen in the top 10 percent of their high school class: 0.1822
Acceptance rate: - 0.0103
Faculty resource rank: -0.0693
Percentage of classes with fewer than 20 students: 200.0714
Percentage of classes with 50 or more students: -0.1504
Student/faculty ratio: 0.0727
Percentage of faculty who are full time: -0.1082
Graduation retention rank: -0.1241
Freshman retention: 0.1964
Financial resources rank: -0.1051
Alumni giving rank: 0.1776

| College | Score | Aca. | Sel | SAT | Top 10 | Acc. | Fa. R. | $<20$ | $\geq 50$ | Rat. | \% FT | Gr. R. | Fr. R. | Fin. | Alum. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Williams | 100 | 92 | 4 | 1310-1530 | 91 | 17 | 3 | 71 | 4 | 7 | 93 | 1 | 97 | 6 | 58 |
| Amherst | 98 | 92 | 5 | 1320-1530 | 84 | 13 | 7 | 70 | 2 | 9 | 94 | 1 | 98 | 10 | 57 |
| Swarthmore | 96 | 91 | 6 | 1350-1530 | 84 | 15 | 7 | 74 | 2 | 8 | 93 | 4 | 97 | 9 | 46 |
| Middlebury | 94 | 87 | 6 | 1290-1480 | 86 | 18 | 17 | 68 | 1 | 9 | 94 | 11 | 96 | 3 | 55 |
| Pomona | 94 | 87 | 2 | 1370-1550 | 90 | 14 | 20 | 70 | 1 | 8 | 94 | 1 | 98 | 6 | 43 |
| Bowdoin | 93 | 87 | 8 | 1330-1490 | 83 | 16 | 14 | 68 | 1 | 10 | 93 | 6 | 96 | 14 | 50 |
| Wellesley | 93 | 89 | 12 | 1290-1490 | 78 | 31 | 12 | 69 | 1 | 8 | 93 | 14 | 95 | 10 | 46 |
| Carleton | 92 | 88 | 12 | 1320-1510 | 78 | 31 | 16 | 65 | 1 | 9 | 97 | 4 | 97 | 27 | 58 |
| Haverford | 91 | 83 | 2 | 1300-1500 | 94 | 25 | 5 | 79 | 1 | 8 | 94 | 6 | 96 | 15 | 44 |
| Claremont <br> McKenna | 90 | 85 | 14 | 1300-1480 | 71 | 14 | 4 | 86 | 2 | 9 | 94 | 11 | 96 | 21 | 43 |
| Vassar | 90 | 88 | 14 | 1320-1470 | 74 | 23 | 20 | 68 | 0.3 | 8 | 95 | 6 | 97 | 13 | 33 |
| Davidson | 89 | 83 | 10 | 1270-1450 | 82 | 28 | 15 | 69 | 0 | 11 | 99 | 6 | 96 | 37 | 53 |
| Harvey <br> Mudd | 89 | 89 | 1 | 1430-1570 | 95 | 22 | 18 | 67 | 2 | 8 | 97 | 21 | 98 | 18 | 33 |
| US Naval Academy | 88 | 88 | 46 | 1160-1380 | 53 | 7 | 24 | 61 | 0 | 9 | 94 | 25 | 97 | 1 | 21 |
| Washington and Lee | 88 | 78 | 9 | 1310-1480 | 81 | 18 | 2 | 74 | 0.2 | 9 | 91 | 14 | 94 | 25 | 46 |
| Hamilton | 87 | 81 | 17 | 1310-1470 | 74 | 27 | 6 | 74 | 1 | 9 | 94 | 21 | 95 | 23 | 47 |
| Wesleyan | 86 | 85 | 19 | 1300-1480 | 66 | 24 | 48 | 68 | 5 | 9 | 97 | 6 | 96 | 29 | 49 |
| Colby | 84 | 81 | 25 | 1250-1420 | 61 | 29 | 20 | 69 | 2 | 10 | 93 | 14 | 95 | 29 | 41 |
| Colgate | 84 | 83 | 19 | 1260-1440 | 67 | 29 | 29 | 64 | 2 | 9 | 95 | 14 | 94 | 32 | 40 |
| Smith | 84 | 85 | 35 | 1200-1440 | 61 | 45 | 20 | 66 | 5 | 9 | 97 | 35 | 92 | 21 | 36 |
| US Military Academy | 83 | 83 | 28 | 1150-1370 | 58 | 27 | 43 | 67 | 3 | 10 | 95 | 14 | 94 | 35 | 46 |
| Bates | 83 | 83 | 28 | 1260-1420 | 58 | 27 | 43 | 67 | 3 | 10 | 95 | 14 | 94 | 35 | 46 |
| Grinnell | 83 | 86 | 32 | NA | 62 | 51 | 29 | 62 | 0.3 | 9 | 91 | 28 | 94 | 27 | 40 |
| Macalester | 82 | 83 | 19 | 1240-1440 | 70 | 35 | 35 | 70 | 1 | 10 | 89 | 28 | 94 | 41 | 39 |
| Bryn Mawr | 81 | 83 | 39 | 1200-1430 | 60 | 46 | 27 | 74 | 3 | 8 | 90 | 47 | 92 | 23 | 40 |
| Oberlin | 81 | 82 | 19 | 1280-1460 | 68 | 30 | 43 | 70 | 3 | 9 | 96 | 32 | 94 | 37 | 38 |

Data published for U.S. News \& World Report 2013 rankings. The columns corresponds to the following categories (left-to-right): college name, overall score, academic reputation, selectivity rank, 25 th and 75 th percentile SAT scores, percentage of freshmen in the top 10 percent of their high school class, acceptance rate, faculty resource rank, percentage of classes with fewer than 20 students, percentage of classes with 50 or more students, student/faculty ratio, percentage of faculty who are full time, graduation retention rank, freshman retention, financial resources rank, and alumni giving rank.

