March 27, 2008

Securities and Exchange Commission 100 F Street NE Washington, DC 20549 Attn: Mindy Hooker, Division of Corporation Finance

RE: Paychex, Inc.

Form 10-K for the Fiscal Year Ended May 31, 2007

Filed July 20, 2007 File #0-11330

Dear Ms. Hooker:

Paychex, Inc. hereby responds to the comments of the Staff of the Securities and Exchange Commission (the "Commission") in their letter dated February 19, 2008, with respect to the above-referenced filings. For the convenience of the Staff, the Staff's comments are set forth below in bold type, followed by our response.

Form 10-K for the fiscal year ended May 31, 2007 Results of Operations — Operating Income, page 20

- 1. We note your use of adjusted operating income as an operating performance measure and that you also use this measure in evaluating management's performance in generating those results. To ensure compliance with Item 10(e)(i) of Regulation S-K please enhance future disclosures to:
  - Expand your discussion of the limitations of the adjusted operating income to address how each item materially limits the usefulness of the measures;
  - State how you compensate for the material limitations of using this measure;
  - State the economic substance behind your decision to use such a measure;
  - Provide substantive reasons why management believes this measure provides useful information to investors.

We had considered Item 10(e)(i) of Regulations S-K in preparing our disclosures. We appreciate the comments made by the Commission and will further enhance our disclosures in the future to address the limitations of adjusted operating income as a non-GAAP measure and the reasons we believe providing it to our investors will enhance their understanding of our business operations.

In considering Item 10(e)(i), management compensated for the limitations of the adjusted operating income non-GAAP measure by providing the GAAP measure at equal or greater prominence in Management's Discussion and Analysis and in future filings we will continue to ensure that the GAAP measure always has equal or greater prominence throughout our filing. We understand that our adjusted operating income is a non-GAAP measure and in the future will identify to the reader that

- the calculation is not based on generally accepted accounting principles and is not the required form of disclosure by the Commission;
- such measures should not be considered as a substitute for operating income and should not be used in isolation but in conjunction with the GAAP measure;

  and

• the use of the non-GAAP measure may produce results that vary from those of the GAAP measure.

We believe the presentation of adjusted operating income is an appropriate additional measure to provide to our investors as it is an indicator of our core business operations performance period over period. It is also the measure used internally for establishing the following year's targets and measuring management's performance in connection with certain performance-based compensation payments and awards. Interest on funds held for clients has been and will continue to be presented as an adjustment to operating income due to the volatility of interest rates which are not within the control of management. The expense charge to increase the litigation reserve was also used as an adjustment to operating income due to its unusual and infrequent nature. The litigation reserve expense is outside the normal course of our operations and obscures comparability of overall performance, period over period, when included in operating income. The basis for the adjustment for share based compensation is covered in response to 2. below.

For these reasons, management continues to believe that the adjusted operating income measure is the best indicator, and a benchmark, routinely used by our investment community, in evaluating the performance of our business operations. Additionally, management and our Board of Directors intend to continue to use this measure internally to set and measure performance targets as established under our annual officer incentive program.

2. We also note that you have included an adjustment related to share based compensation. Please tell us what consideration you have given to Staff Accounting Bulletin No. 107 Topic 14:G.

We considered both Item 10(e)(i) of Regulation S-K and Staff Accounting Bulletin No. 107 Topic 14:G in including the share based compensation in the non-GAAP measure for the fiscal year ended May 31, 2007. This fiscal year was the first year that the expense from share based compensation was included in our results of operation. To provide our investor with the appropriate level of comparability for our business performance over the prior fiscal year, we determined it was appropriate to exclude the share based compensation in adjusted operating income for the fiscal year ended May 31, 2007. In addition to comparability between fiscal periods, the performance target established for management at the beginning of the fiscal year ended May 31, 2007 excluded share based compensation from operating income. Internally prepared financial statements used by management and the Board of Directors on a monthly basis in reviewing the results of our performance also excluded share based compensation from operating income of comparable periods. Share based compensation is no longer excluded from performance targets established for management. As such our future filings will not contain the adjustment used for the fiscal year ended May 31, 2007.

Paychex, Inc. hereby acknowledges that:

- Paychex, Inc. is responsible for the adequacy and accuracy of the disclosure in its filings;
- · Staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- Paychex, Inc. may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under federal securities laws of the United States

Additionally, on March 26, 2008, we filed our Form 10-Q for the three months ended February 29, 2008, a copy of which is enclosed for your reference. Please note that, consistent with our response herein, we have enhanced our disclosures to address the limitations of the non-GAAP measure, while still providing the information that we believe is useful to our investors in understanding our business operations. If you have any questions, or require additional information, please do not hesitate to contact me at (585) 385-6666.

Sincerely,

/s/ John M. Morphy John M. Morphy Senior Vice President, Chief Financial Officer, and Secretary