

November 1, 2010

VIA FACSIMILE (703.813.6968) AND OVERNIGHT MAIL

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

RE: Paychex, Inc.
Form 10-K for the year ended May 31, 2010
Definitive Proxy Statement on Schedule 14A filed September 3, 2010
File No. 000-11330

Dear Ms. Malone:

Paychex, Inc. hereby responds to the comments of the Staff of the Securities and Exchange Commission (the "Commission") in their letter dated October 20, 2010, 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.

We appreciate the comments made by the Commission, and will clarify or further enhance our disclosure in our future filings in response to these comments. Our next Form 10-K will be filed in mid-July 2011. Our next Definitive Proxy Statement on Schedule 14A will be for the 2011 Annual Meeting of Stockholders and will be filed with the Commission in early September 2011.

Form 10-K for the Fiscal Year End May 31, 2010

Exhibits 31.1 and Exhibit 31.2

- 1. We note that you omitted or changed language in paragraphs 4(d) and 5 of the officer certifications. In future filings, please use the exact language in the certification presented in Item 601(b)(31) of Regulation S-K. Please also comply with this comment with respect to the certifications filed with your quarterly reports.**

In future filings, we will ensure that in our certifications we use the exact language as presented in Item 601(b)(31) of Regulation S-K.

Definitive Proxy Statement on Schedule 14A

Nomination process, page 22

- 2. We note your statement in the second sentence of the first paragraph of this section. In future filings, please disclose whether you consider diversity in evaluating candidates for nomination to the board. If the committee has a policy with regard to the consideration of diversity in identifying director nominees, describe how this policy is implemented, as well**
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as how the nominating committee assesses the effectiveness of its policy. Please refer to Item 407(c)(2)(vi) of Regulation S-K.

As we mentioned on page 22 of our Proxy Statement, the Board has determined that it is necessary for the continued success of the Company to ensure that the Board is composed of individuals having a variety of complementary experience, education, training, and relationships relevant to the then-current needs of the Board and the Company. While the Board strives to achieve diversity in experience and skills within the composition of the Board, there is no formal policy regarding diversity. In future filings, we will make an affirmative statement to that effect.

Compensation Discussion and Analysis, page 24

Elements of Compensation, page 26

3. **We note your disclosure in the last paragraph on page 26. In future filings, please disclose your named executive officers' total compensation in comparison to that of the Peer Group for the last completed fiscal year (i.e. below, at or above the median total compensation of the Peer Group). See Item 402(b)(2)(xiv) of Regulation S-K.**

Currently, there are no comparable matches available in our Peer Group to provide a comparison of total compensation for all our named executive officers ("NEOs"). In the past fiscal year, we were able to match our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") to all of our Peers. The committee uses those matches made each fiscal year as a point of reference for all NEOs.

On page 29 of our Proxy Statement, we did indicate that our CEO's base salary and annual officer performance incentive program were comparable to the median of our Peer Group. We also indicated that the total value of equity awards granted to our CEO were comparable to the lowest quartile of the Peer Group. In future filings, we will provide the comparison for any additional NEO matches (or state that there are not matches) and clarify how the Peer Group information is utilized in the evaluation of the other NEOs' compensation.

Annual Officer Performance Incentive Program, page 27

4. **In future filings, please define "annualized new business revenue" and describe how the number is calculated from your audited financial statements. Please refer to Instruction 5 of Item 402(b) of Regulation S-K.**

Annualized New Business Revenue is the approximate amount of revenue to be earned over the first 12-month period, from the sale in the current fiscal year of certain Payroll, Human Resource Services and Insurance services to new clients and new product sales to existing clients. This measurement is a leading indicator for the subsequent year's service revenue growth. This measure is not directly calculated from our audited financial statements, as reported service revenue also includes recurring revenue from pre-existing clients. In future filings, we will provide a description of annualized new business revenue.

- 5. You indicate in the last paragraph on page 27 that the committee establishes the targets for payout. In future filings, please disclose if the committee assigns a particular weighting to each performance target (such as those in the chart on page 24) in your determination of the quantitative payouts for each NEO. See Item 402(b)(2)(vi) of Regulation S-K.**

The Governance and Compensation Committee establishes the performance targets for payout under the Annual Officer Performance Incentive Program (“annual incentive program”). For fiscal 2010, the NEOs had an opportunity to achieve additional cash compensation based primarily on the four performance targets referenced on page 24: annualized new business revenue, annual service revenue, annual operating income, net of certain items; and annual operating income, net of certain items, as a percentage of annual service revenue. Weighting of each performance target is assigned by the committee when the targets are established. The weighting of each target varies based upon the particular NEO’s position. Each of the performance targets applicable to a NEO’s annual incentive program provide the NEO an opportunity to earn a percentage of their annual base salary based on achievement of the target at threshold, target, and maximum. The cumulative percentage of salary that can be earned by all quantitative measures applicable to each NEO at target are the percentage disclosed on page 28 as follows: 105% for the CEO, 65% for Senior Vice Presidents, and 40% for Vice Presidents. In future filings, we will include a discussion of the weighting of the various performance measures as part of the annual incentive program.

- 6. We note your disclosure in the last paragraph of this section on page 28 regarding the qualitative goals under the annual incentive program. Please disclose whether the committee exercised its discretion to award the qualitative component for each named executive officer.**

For fiscal 2010, the committee did exercise its discretion to award the qualitative component for each of the NEOs at the maximum of 20% of base salary for the CEO and 10% of base salary for the other NEOs. In future filings, we will clarify in our discussion of the qualitative component whether the committee exercised its discretion to award such component for each NEO.

Equity-Based compensation, page 28

- 7. In future filings, please disclose whether the committee exercised its discretion to adjust the stock awards granted in July 2009. When the committee exercises such discretion, please disclose the individual performance and/or other factors considered in adjusting the award. See Item 402(b)(2)(vi) of Regulation S-K.**

The committee determines whether or not to exercise discretion to increase or decrease the estimated total value of the stock awards at the time of grant. Any increase or decrease is determined on a case-by-case basis for each individual officer, taking into consideration individual performance and retention. Based on these considerations, a value may be delivered that is higher or lower than the standard value delivered to each level of officer. The number of shares to be granted is calculated from the total estimated value. After the date of grant, the committee does not make any changes to the shares awarded. In determination of the July 2009 stock awards, the committee did exercise their discretion for certain individual awards. In future filings we will provide discussion of whether or not the committee exercises discretion in determining stock awards, and will include the factors considered by the committee.

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.

If you have any question, or require additional information, please do not hesitate to contact me.

Sincerely,

/s/ Martin Mucci

Martin Mucci
President and Chief Executive Officer