MEMORANDUM

Date: September 15, 2004

To: Stephen C. Goss, Chief Actuary

From: Alice H. Wade, Deputy Chief Actuary
       Felicite C. Bell, Actuary
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Subject: Estimated Long-Range OASDI Financial Effect of Various Possible Changes in the Level of Legal Immigration

This memorandum provides long-range estimates of the financial status of the OASDI program assuming various hypothetical changes in the level of legal immigration specified in current law. This analysis has been produced at the request of Senator Chuck Hagel, Chairman of the Subcommittee on International Economic Policy, Export and Trade Promotion. All estimates included in this memorandum are based on the intermediate projections of the 2004 Trustees Report.

Background: Current Law

For the intermediate projections of the 2004 Trustees Report, total net immigration is ultimately assumed to be 900,000 persons per year. This total reflects reaching an ultimate annual level of 600,000 net legal immigrants in 2011 and 300,000 net other immigrants in 2024. Additional details concerning the projections are given in the 2004 Trustees Report.

Net legal immigration, intermediate assumptions
The assumed level of net annual legal immigration of 600,000 represents a combination of 800,000 legal immigrants and 200,000 legal emigrants. The assumed annual level of legal immigration reflects the widely held interpretation of the caps in effect under current law. The 25 percent ratio of emigrants to immigrants is based on research conducted by the United States Citizenship and Immigration Services (USCIS) and other experts. The age-sex distribution of the assumed legal immigration is based on recent data supplied by USCIS. The average age for the distribution of legal immigration for each future year is 30 years for men and 31 years for women. The assumed age-sex distribution of future legal emigration is based on estimates of foreign-born emigration from the United States Census Bureau data.

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1 This report can be found on the internet at www.socialsecurity.gov/OACT/TR/TR04/index.html.
Net other immigration, intermediate assumptions

The assumed age-sex distribution for the net other immigration of 300,000 is based on unpublished estimates by the U.S. Census Bureau of the undocumented population. The average age for the distribution of net other immigration is much younger than that for legal immigration. The resulting average age for net other immigration for each future year is 21 years for men and 22 years for women.

Description of Possible Changes in the Limits on Legal Immigration

Five possible changes in limits on legal immigration are intended to result in a range of effects on the future level of total and net legal immigration. For each change the ratio of legal emigration to legal immigration is set to 25 percent to be consistent with the intermediate assumptions of the 2004 Trustees Report. The first change would be intended to reduce legal immigration by 800,000 per year (from 800,000 to 0). Net legal immigration would be expected to decrease by 600,000 per year (from 600,000 to 0). The second possible change would be intended to reduce legal immigration by about 41 percent, or 330,000 per year (from 800,000 to 470,000). Net legal immigration would be expected to decrease by 247,500 per year (from 600,000 to 352,500). The third possible change would be intended to reduce legal immigration by 33 percent, or 264,000 per year (from 800,000 to 536,000). Net legal immigration would be expected to decrease by 198,000 per year (from 600,000 to 402,000). The fourth possible change would be intended to increase legal immigration by 20 percent, or 160,000 per year (from 800,000 to 960,000). Net legal immigration would be expected to increase by 120,000 per year (from 600,000 to 720,000). The fifth possible change would be intended to increase legal immigration by 33 percent, or 264,000 per year (from 800,000 to 1,064,000). Net legal immigration would be expected to increase by 198,000 per year (from 600,000 to 798,000).

Estimated Effect of Changes on Long-Range OASDI Financial Status

The table below provides estimates of the effects of enacting each of the five possible changes in the current limits for legal immigration. Because the specific changes that would be made to limits in each case are not identified, the overall changes are considered hypothetical and the estimates preliminary. For each change it is assumed that limits would be altered in a way that would result in a specified increase or decrease in the expected level of annual immigration beginning in 2004 that would essentially preserve the age-sex distribution of immigrants by type (legal immigrants, legal emigrants, and other immigrants). The table presents the estimated change in the OASDI actuarial balance for both 50-year and 75-year valuation periods, where all other assumptions are assumed to be maintained at the levels for the intermediate assumptions of the 2004 Trustees Report. In particular, no change in the level of net other immigration is assumed to result from mandated changes in legal immigration. In practice, the effect of changes in limits on legal immigration may be partly offset by the resulting effects on the level of net other immigration.
Estimated OASDI Actuarial Balances with Various Changes in the Level of Legal Immigration (800,000 under Current Law)

Actuarial Balances are Expressed as Percentages of Effective Taxable Payroll

<table>
<thead>
<tr>
<th>Change in Annual Legal Immigration Level</th>
<th>Actuarial Change in Actuarial Balance</th>
<th>Actuarial Change in Actuarial Balance*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50-year (2004-2053)</td>
<td>75-year (2004-2078)</td>
</tr>
<tr>
<td>0</td>
<td>-1.03</td>
<td>-1.89</td>
</tr>
<tr>
<td>-800,000</td>
<td>-1.34</td>
<td>-2.20</td>
</tr>
<tr>
<td>-330,000</td>
<td>-1.15</td>
<td>-2.01</td>
</tr>
<tr>
<td>-264,000</td>
<td>-1.13</td>
<td>-1.98</td>
</tr>
<tr>
<td>+160,000</td>
<td>-0.96</td>
<td>-1.83</td>
</tr>
<tr>
<td>+264,000</td>
<td>-0.93</td>
<td>-1.79</td>
</tr>
</tbody>
</table>

*Change is measured from the actuarial balance for the intermediate assumptions of the 2004 Trustees Report
NOTE: Totals do not necessarily equal the sums of rounded components.

The estimated effects of these changes in the limits for legal immigration on the financial status of the OASDI program reflect expected initial changes in the working-age population, and subsequent changes in the population at all ages. The population changes are not only due to the direct change in the number of foreign-born residents, but also to the resulting change in the number of births in the United States.

Changes in the number of immigrants entering the country have direct and immediate effects on the size of the working-age population, the size of the labor force, the number of workers in OASDI covered employment, and thus the size and growth rate in Gross Domestic Product (GDP). For example, the case where legal immigration is intended to decrease by 800,000 per year would reduce the growth rate in the employed labor force by about one quarter of one percentage point per year initially. This would translate to a similar reduction in the rate of GDP growth. However, this negative effect would begin to be offset about 40 years later due to a reduction in the number of individuals reaching retirement age. Therefore, a substantial reduction in the number of legal immigrants would reduce the growth rate in the GDP and the OASDI taxable payroll (the tax base for the program) for several decades before there would be a significant effect on the growth rate in the cost of the program.

Changes in the number of immigrants entering the country also have substantial indirect effects, through changes in the future number of births and their resulting input on the size of the working-age population, the size of the labor force, the number of workers in OASDI covered employment, and thus the size and growth rate in GDP. These effects on Social Security financing of the change in the number of births, however, would not be evident for about two decades after the initial change in immigration. And the partially offsetting effects of the change in births on the number of beneficiaries would not be evident for about 60 years.
For each of the five possible changes in the limits for legal immigration, the size of the change in the OASDI actuarial balance is about the same for the 50-year and the 75-year valuation periods. As mentioned above, the size of the OASDI taxable payroll is affected immediately by a change in the rate of legal immigration, with the partially offsetting effect on benefits payable not appearing for roughly four decades. Thus, the combined effects of these implications would tend to result in a greater change in the OASDI actuarial balance for the 50-year valuation period than for the 75-year period. However, the effect of the change in the number of children being born to legal immigrants is not evident in the workforce for about two decades, and thus would result in a greater change in the OASDI actuarial balance for the 75-year valuation period than for the 50-year period.

These changes may also be viewed in terms of the percentage change they imply in the relative size of the actuarial deficits that are estimated under present law for the 50-year and 75-year periods. The percentage change in the size of the OASDI actuarial deficit is significantly larger for the 50-year period than for the 75-year period for each of these possible legislative proposals. This largely results from the fact that the magnitude of the actuarial deficit, as a percentage of payroll, is substantially smaller for the 50-year period.

The relative percentage increases in the size of the OASDI actuarial deficit, for the 50-year and 75-year periods, respectively, are 31 and 17 percent for the first possible change, 12 and 7 percent for the second possible change, and 10 and 5 percent for the third possible change. The relative percentage decreases in the size of the OASDI actuarial deficit, for the 50-year and 75-year periods, respectively, are 6 and 3 percent for the fourth possible change and 10 and 5 percent for the fifth possible change.

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2 Refers to the OASDI actuarial balance expressed as a percentage of OASDI taxable payroll.