EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

LEGISLATIVE REFERENCE DIVISION

ECONOMICS , SCIENCE , AND GENERAL GOVERNMENT BRANCH

TO:
Beth Van Hanswyck
Julie Fernandes
Debra Bond

FROM: INGRID SCHROEDER
phone: (202) 395-3883
FAX: (202) 395-3109

DATE: 4/21/98

NUMBER OF PAGES (including this cover sheet): 15

COMMENTS:

Final H1B testimony

Please call (202) 395-3454 to report any difficulties with transmission of this fax.

→ Julie Fernandes
Ingrid Schroeder OMB
witness list attached
F. 4/20/98

STATEMENT OF JOHN R. FRASER
DEPUTY WAGE AND HOUR ADMINISTRATOR
EMPLOYMENT STANDARDS ADMINISTRATION
U.S. DEPARTMENT OF LABOR
BEFORE THE
SUBCOMMITTEE ON IMMIGRATION AND CLAIMS
OF THE HOUSE JUDICIARY COMMITTEE

April 21, 1998

Mr. Chairman and Members of the Subcommittee:

We appreciate this opportunity to share the views of the Administration on whether this country's important high-technology industry should be afforded increased access to temporary foreign workers to meet its growing demand for highly skilled workers. In doing so, I want to again call your attention to the need to train U.S. workers first in order to provide them with the opportunity to acquire the skills needed to compete in our rapidly changing economy, and to the pressing need for reform of the H-1B nonimmigrant visa program.

Our information technology (IT) industry is essential to our continuing strong economic growth and wider prosperity. Our interest in the industry's strength is evidenced by our participation in a recent convocation in Berkeley that assessed IT work force needs. Further, as you know from Administration proposals advanced since 1993, we believe that the H-1B program needs fundamental reform. I would like to commend the Subcommittee for its interest in these issues.

We believe the issue of whether to increase the IT industry's access to temporary foreign workers should be evaluated within the framework of the following three questions:

(1) Is there a shortage of skilled U.S. workers to fill jobs in the IT industry and meet

future workforce needs?

(2) What would be the consequences of raising the annual H-1B cap?

(3) Does the current H-1B program need to be reformed in order to provide industry appropriate access to temporary foreign workers while protecting the job opportunities, wages and working conditions of U.S. workers?

I will address each of these in turn.

Tight Labor Markets and IT Skills Shortages

Proponents of increasing the annual cap on H-1B visas argue that this increase is necessary for the IT industry to be able to overcome an acute shortage of skilled U.S. workers. While there is no dispute that there is strong growth in demand for workers in the IT industry, it is much less clear what may be the magnitude of any shortage of skilled U.S. workers to meet this demand, or whether the domestic labor market will be able – as it has over the last decade – to satisfy projected job growth.

U.S. employment has been growing rapidly, labor markets are increasingly tight, and they are likely to remain so. Though this is true for the nation as a whole, IT labor markets appear to be particularly affected. Employment opportunities for computer systems analysts, engineers, and scientists have been growing by 10 percent a year — well above the growth of comparable occupations — and are expected to continue growing at a comparable rate through 2006. The Bureau of Labor Statistics (BLS) predicts that the U.S. will require more than 1.3 million new workers in IT core occupations between 1996 and 2006 to fill job openings projected to occur due to growth and the need to replace workers who leave the labor force or transfer to other occupations.

The IT skills shortage issue is somewhat controversial. Some industry advocates assert that there exist more than three hundred thousand unfilled jobs within the IT industry, and that these vacancies are raising business costs and hurting U.S. competitiveness. Industry points to a number of other factors to substantiate their assertion of an IT skills shortage – large numbers of want ads, hiring bonuses, aggressive recruiting, and high turnover of IT specialists within the industry.

On the other hand, critics argue that the IT industry: (1) overstates the problem by producing inflated job vacancy data and equating it to skills shortages; (2) continues to lay off tens of thousands of workers (e.g., Intel, Netscape, Cypress Semiconductor and Silicon Graphics recently announced large lay-offs); and (3) fails to tap reservoirs of available talent by insisting on unnecessarily specific job requirements and not providing more training to develop incumbent workers' skills.

One point of contention is the confusion between equating job vacancies and actual skills shortages. While an industry association-sponsored survey indicates that there may be as many as 350,000 job vacancies in the IT industry, as you will hear, the General Accounting Office (GAO) has concluded that this does not necessarily signal an acute shortage of skilled workers. In fact, most industries and firms (particularly those with rapid employment growth and high worker turnover) will have large numbers of job openings that may not indicate skills shortages.

While higher than average wage growth can be a reliable indicator of skill shortages, the wage growth record for the IT industry is mixed. Though BLS wage trends for broad computer-related categories show only average wage growth between 1988 and 1997 for all categories, it only shows above-average wage growth in 1996 and 1997 and only in the lower-skill computer-related categories, such as programmers. At the same time, a variety of industry wage surveys show larger wage increases in 1996 and 1997 in specialized, high-skill occupations.

The Subcommittee should also take into consideration other factors that bear on the question of the scope and duration of any labor shortage in the IT industry:

- The current "Year 2000" problem is now occupying thousands of IT workers but only for the short-term;
- New technologies are being introduced that are creating more efficient ways to produce software, store and retrieve data, speed up computations, and generally improve the productivity of the IT work force;
- The number of computer science enrollments has risen significantly in the last two years (and nearly three-quarters of all IT workers got their education in other disciplines).

Consequences of Raising the H-1B Visa Cap

We strongly urge that any decision to raise the H-1B visa cap carefully consider the possible adverse impact of such a move on the normal process by which labor markets adjust to a growing demand for workers. The labor market should be permitted to adjust to this increased demand without introducing unnecessary factors which could delay, if not prevent, these normal market adjustments. Indeed, the IT labor market has already begun to respond to the signals of increased demand. A survey of U.S. Ph.D. departments of computer science and computer engineering showed bachelor-level enrollments were up 46 percent in 1996, and another 39 percent in 1997 – nearly doubling over the two year period.

It is also important to remember that tight labor markets are good for U.S. workers. A tight labor market causes employers to raise wages, improve working conditions, and provide increased training to enable currently employed workers to keep pace with technology. An increased demand for trained workers induces educational and job training institutions to teach new skills. With more opportunities for training, workers acquire skills needed to obtain better, higher-paying and more secure jobs, thereby creating open jobs and career ladders for those just entering or reentering the labor market (e.g., young people, minorities, displaced workers, welfare recipients and other disadvantaged groups). Therefore, tight labor markets create incentives for employers and workers to react in ways needed to achieve many of the Nation's top priorities: raising wages; providing greater opportunities for lifelong learning; and moving welfare recipients, out-of-school youth, and dislocated workers into jobs.

However, while tight labor markets are good for U.S. workers, labor markets can sometimes be slow to respond to skills shortages. In these circumstances, it is often argued that temporary foreign workers are needed in the short-term to provide necessary skills while the labor market adjusts to provide U.S. workers with the requisite training. Without needed foreign temporary workers, industries experiencing skill shortages may adjust in ways that do not serve the short-term or long-term priorities of the country, either by reducing job creation or by moving jobs overseas. Further, because the IT sector is so critical to our global competitive edge, the U.S. economy could suffer disproportionate harm if skill shortages do become acute.

Because the expanded use of foreign temporary workers may interfere with labor market adjustments and may make achieving our other priorities more difficult, we must make sure that any increase in the annual number of foreign temporary workers is done with care to ensure that the use of these foreign temporary workers does not interfere with healthy adjustments in the labor market.

We must also be cognizant that raising the H-1B cap may subvert the protection of U.S. workers that is one of the key principles underlying this Administration's strong support of legal immigration. Raising the H-1B cap will almost certainly increase permanent employment-based legal immigration and, perhaps, illegal immigration. Nearly half of those who become permanent employment-based immigrants convert from H-visa nonimmigrant status. Rather than filling a temporary labor shortage, conversion fills permanent jobs that will then not be available to U.S. workers and students who we want to be able and prepared to fill high-tech jobs in our economy.

The Department of Labor has heard from many concerned individuals and groups on the issue of the adverse impact on U.S. workers of raising the annual cap on H-1B visas. I would like to request that copies of the many letters we have received from these people be included in the record of today's hearing.

The Administration believes that our first response to meeting the workforce needs of the IT industry should be to provide the needed skills to U.S. workers to qualify them for IT jobs. The Administration already has taken significant steps to increase our capacity to enhance workforce skills. The President continues to pursue comprehensive reform of the Nation's employment and training system by working with Congress to enact the principles embodied in his GI Bill proposal. Moreover, in the historic balanced budget agreement of last summer, the President insisted on and achieved the largest increase in 30 years in the Federal investment to expand the skills of American workers, including:

- the largest Pell Grant increase in two decades;
- Hope Scholarships to make the first two years of post-secondary education universally available;
- the Lifelong Learning Tax Credit for the last 2 years of college and continuing adult education and training to upgrade worker skills;
- a major increase in employment and training resources, including increases for dislocated workers and disadvantaged adults and youth; and
- a $3 billion program to help long-term welfare recipients secure lasting, unsubsidized employment.

Further, the Administration announced several new initiatives at the recent Berkeley Convocation to help address the growing demand for IT workers:

- A Labor Department Technology Demonstration project to test innovative ways of establishing partnerships between local workforce development systems, employers, training providers and others to train dislocated workers in needed high tech skills;
- The expansion and integration of America's Job Bank and America's Talent Bank to allow employers and workers to list and access job openings and worker resumes in one integrated system; and
- The convening of four town hall meetings by the Commerce Department to discuss IT workforce needs, identify innovative practices, and showcase successful models.

In addition, last week President Clinton and Secretary Herman announced that grants totaling $1.6 million are being provided to projects in four states to continue highly successful programs to train dislocated workers for high paying jobs in information technology.

Finally, with the Technology Literacy Challenge and related educational programs, the Administration has put strong emphasis on effective use of educational technology to strengthen our nation's schools and school-to-work transition. Linking elementary/secondary schools, institutions of higher education, and business can produce the knowledge, know-how, and skills our nation's businesses and young people need in IT. This creates opportunities for business and America's students alike.

We believe that there is more that can be done to move U.S. workers into high technology jobs, and we welcome the discussions that may be sparked by this hearing. We are committed to continuing a dialogue with the major stakeholders on this critical workforce issue — government, industry, workers, and education and training institutions — to better define the workforce needs of the IT industry and develop appropriate solutions to meet these needs domestically through commitments from each of the stakeholders.

In sum, Mr. Chairman, our assessment of the likely effects of raising the H-1B cap reconfirms our strong conviction that our primary public policy response to skills mismatches due to changing technologies and economic restructuring must be to prepare the U.S. workforce to meet new demands. Yet we recognize that short-term demands for skills may require that we develop a balanced, short-term response to meet urgent needs while we actively adjust to rapidly changing circumstances. However, increased numbers of temporary foreign workers should be the last — not the first — public policy response to skills shortages.

Given this broader context, let me now turn to the third of the issues I listed — the pressing need for reform of the H-1B nonimmigrant program.

H-1B Nonimmigrant Program Must be Reformed

The H-1B visa program allows the admission of up to 65,000 workers each year (to stay for as long as six years), to meet short-term, high-skills employment needs in the domestic labor market. Temporary visa programs, like H-1B, are intended to allow employers who are faced with a domestic skills shortage to have access to temporary foreign workers with the requisite skills while the domestic labor market makes appropriate adjustments.

However, there exist serious structural flaws in the current H-1B program. These flaws are documented in a May 1996 report by the Department's Inspector General (IG). I would ask the Subcommittee to accept the IG's full report in the record of today's hearing.

The IG found that, despite the legislative intent:

> ". . . the [H-1B] program does not always meet urgent, short-term demand for highly-skilled, unique individuals who are not available in the domestic work force. Instead, it serves as a probationary try-out employment program for illegal aliens, foreign students, and foreign visitors to determine if they will be sponsored for permanent status."

The IG also found that "some [H-1B] employers use alien labor to reduce payroll costs either by paying less than the prevailing wage to their own alien employees or treating these aliens as independent contractors, thereby avoiding related payroll and administrative costs." It found, in addition, that "other [H-1B] employers are 'job shops' whose business is to provide H-1B alien contract labor to other employers." The IG concluded that the H-1B program does little to protect the jobs or wages of U.S. workers and it recommended eliminating the current program and establishing a new program to fulfill Congress' intent.

Employers obtain H-1B workers by simply filing a labor condition application (LCA) with the Department affirming that they have complied with four requirements:

- that the higher of the local prevailing rate or the wage paid to the employer's similarly-employed workers will be paid to the foreign workers;
- that no strike or lockout exists involving the occupation;
- that notification has been provided to U.S. workers or their union; and
- that the employment of H-1B nonimmigrants will not adversely affect the working conditions of U.S. workers similarly employed.

By law, the Labor Department can do no more than review these attestations for completeness and obvious inaccuracies -- to determine whether an employer checked all of the boxes, made no flagrant errors, and signed the attestation -- and must do so within 7 days of receipt.

Because current law does not require any test for the availability of qualified U.S. workers in the domestic labor market, many of the visas under the current cap of 65,000 can be used by employers to hire foreign workers for purposes other than meeting a skills shortage. In addition, current law does not require a U.S. employer to promise not to lay off U.S. workers and replace them with H-1B workers as a condition for gaining access to these foreign temporary workers, and it allows employers to retain H-1B workers for up to 6 years to fill a "temporary" need. We simply do not believe this is right.

In 1993 the Administration asked the Congress to amend the H-1B nonimmigrant program to address these structural problems. Unfortunately for many U.S. businesses and workers, these amendments have not been enacted. The amendments requested in 1993 were carefully designed to ensure continued business access to needed high-skill workers in the international labor market while decreasing the H-1B program's susceptibility to misuse to the detriment of U.S. workers and the businesses that employ them. Briefly stated, the amendments would require employers which seek access to temporary foreign "professional" workers to also attest that:

- they have taken timely and significant steps to recruit and retain U.S. workers in these occupations; and
- they have not laid off or otherwise displaced U.S. workers in the occupations for which they seek nonimmigrant workers in the periods immediately preceding and following their seeking such workers.

Enactment of these reforms will help employers actually facing skills shortages, including those in the IT industry, obtain needed workers through the H-1B program. Under existing law, employers facing skills shortages must compete for available visas (up to the cap of 65,000) on a first-come, first-served basis with other employers that do not face such shortages. Thus, enactment of the proposed amendments would reduce pressure on the visa cap by screening out employers that are not faced with skills shortages and have no interest in recruiting U.S. workers.

If the Administration's reforms are not implemented, as the Inspector General has pointed out, the Labor Department will not be able to ensure that the intended purposes of the program are actually served. The H-1B program exists to ensure that U.S. employers can meet short-term labor needs by limited access to the international labor market. Under current law, the government cannot ensure that employers use the H-1B program for its intended purpose, and that purpose only.

Conclusion

Mr. Chairman, let me conclude by restating that the growing workforce needs of the IT industry can only be met — and the strength and growth of the industry secured in the long run — if we take the steps needed to fully develop and utilize the skills of U.S. workers. Increased reliance on temporary foreign workers should, at most, only be a small part of the solution and must be viewed as a minor complement to the development of the U.S. workforce. Further, let me repeat that reform of the H-1B program is essential to eliminating abuses under the program and providing appropriate protections for U.S. workers. Enactment of these reforms would effectively allocate a greater share of H-1B visas to employers facing actual skills shortages.

I appreciate the interest shown by the Subcommittee and staff in our views, and your thoughtful consideration of them. The Department looks forward to continuing to work closely and cooperatively with you and your staff on these issues.

Mr. Chairman, that concludes my prepared statement. I would be happy to respond to any questions.

WITNESS LIST

COMMITTEE ON THE JUDICIARY

SUBCOMMITTEE ON IMMIGRATION AND CLAIMS

Date: April 21, 1998

Time: 9:30 A.M.

Room: 2237 Rayburn

Re: Hearing on Immigration and America's Workforce for the 21st Century

Witnesses

Panel I

John Fraser
Acting Administrator
Wage and Hour Division
Employment Standards Administration
U.S. Department of Labor

Carlotta Joyner
Director
Education and Employment Issues
Health, Education, and Human Services Division
U.S. General Accounting Office

Panel II

Harris Miller
President
Information Technology Association of America

Dr. Norman Matloff
Department of Computer Science
University of California at Davis

Daniel Sullivan
Senior Vice President for Human Resources
QUALCOMM

William Payson
The Senior Staff

Darryl Hatano
Vice President for International Trade and Government Affairs
Semiconductor Industry Association

Peggy Taylor
Director
Department of Legislation
AFL-CIO

Dr. Richard Lariviere
Vice President of International Programs
University of Texas at Austin

Panel III

Dr. George Borjas
John F. Kennedy School of Government
Harvard University

Dr. Georges Vernez
The RAND Corporation

Alan Reynolds
The Hudson Institute

Debra J. Bond 04/20/98 06:46:25 PM

Record Type: Record

To: Julie A. Fernandes/OPD/EOP, Cecilia E. Rouse/OPD/EOP

cc: Larry R. Matlack/OMB/EOP
Subject: Additional comments on H-1B legislative language

Below are technical comments on the proposed H-1B legislative language that DOL prepared for the deputies meeting last Friday. Please let me know if you have any questions about our suggestions. Thanks--

Recruitment of United States Workers Prior to Seeking Nonimmigrant Workers.

One of the provisions in this section amends the "actual wage" definition to include benefits in addition to salary. Currently, the employer either pays the immigrant worker the actual wage paid to similar workers or the prevailing wage (as determined by DOL) for the occupational classification in which the immigrant will be employed.

It appears as drafted that DOL would not have to conduct additional wage surveys to determine the benefit level, but would instead simply check employer records to make sure they are providing the same level of benefits to the immigrant worker. We should get DOL's interpretation of this provision to make sure it is in line with our reading. One concern about the provision is that it only applies to the "actual wage" and not to the "prevailing wage." This may provide an incentive to an employer to use the prevailing wage instead of the actual wage in order to avoid paying benefits.

Therefore, we recommend adding the same benefit requirement as drafted to the "prevailing wage" section.

New Visa Category Proposal. Creates a new temporary visa category (H-1C) for very high skill levels (master's degree or a bachelor's degree with 5 years specialized experience) instead of raising the H-1B visa cap.

We recommend changing the 5 year experience requirement to 3 years. Given the "priority workers" (as defined by the Immigration and Nationality Act, aliens with extraordinary ability, outstanding professors and researchers, and certain multinational executives and managers) only have a 3 year experience requirement, the 5 year requirement appears too high.

In addition, we recommend that this section be drafted into legislative language and clarify that this is a temporary visa increase which sunsets after 5 years.

Recruit/Retain

1. DPC/NEC Proposal (Modified from Kennedy-Feinstein language)

Pros:

- Leaves decision regarding how to recruit effectively in U.S. labor market up to the employer based on "industry standards"

- "Performance based" approach – recruitment must be "unsuccessful," meaning that either no U.S. worker applicants or that U.S. worker applicants not as well qualified as foreign worker being sought – and would likely encourage hiring of at least some U.S. workers

- Definitions of "industry standards" and "unsuccessful" would be developed and finalized through notice-and-comment rulemaking in which industry-users of H-1B program would have significant input

- Places no real burden on employers who use the H-1B program to supplement their largely U.S. workforce consistent with the statutory intent of the program

- Will likely require some behavior changes by "job shop" users of the H-1B program; may reduce applications/usage of visa numbers under the cap by employers NOT facing labor/skills shortage

- Consistent with approach advocated for five years by the Clinton Administration, in our GATS/WTO commitments, and publicly supported in other immigration bills

Cons:

- H-1B employers do not want to have their hiring decisions subject to second-guessing by DOL through enforcement

- H-1B employers want to be able to hire whoever they think is "best" for the job, irrespective of foreign vs. U.S. worker (and, as above, don't want to have to defend their decision-making in this regard)

- Will likely require some behavior changes by "job shop" users of the H-1B program

- May require some additional recordkeeping by H-1B employers regarding their applications/hiring decisions???

- Defining "unsuccessful" through notice-and-comment rulemaking will be contentious - some will argue that only the employer can decide who is best qualified/should be selected and others will argue that employer should be required to hire any "qualified" U.S. worker

2. <u>DOC Proposal - understood to be that employer attests based on choosing from a list of various recruitment methods</u>

Pros:

- Easy for employers to understand and comply with
- Similar to approach used in permanent labor certification and expired H-1A nonimmigrant nurses program
- From employer perspective, does not subject their hiring decisions to second-guessing by the government through enforcement (only their recruitment activities)

Cons:

- Does not require employers to do anything different than already doing
- Similar to approach used in permanent labor certification program - OIG called "sham recruitment"
- "Procedure based' requirement - as long as the employer does what he/she commits to do doesn't matter whether any U.S. workers hired
- Less likely to encourage any greater hiring of U.S. workers

Displacement/No Lay Off

1. DPC/NEC Proposal (Modified from Kennedy-Feinstein language – perhaps with further modification to change six month to 90-day period)

Pros:

- Protects some, though fairly narrow category of, U.S. workers – both employees and contracted/leased/temporary workers – from being laid off or otherwise displaced/replaced by foreign temporary workers

- Consistent with approach advocated for five years by the Clinton Administration, in our GATS/WTO commitments, and publicly supported in other immigration bills

Cons:

- H-1B employers do not want to have their termination decisions subject to second-guessing by DOL through enforcement

- H-1B employers want to be able to hire whoever they think is "best" for the job, irrespective of foreign vs. U.S. worker (as above, don't want to have to defend their decision-making in this regard) and irrespective of whether they have terminated U.S. workers in the same occupation, no matter how narrowly defined

2. DOC Proposal – not seen; understood to be based on concerns that employers with decentralized operations can't effectively coordinate termination and hiring decision-making among their operations and, thus, employers would (as we understand) attest to steps chosen from a list of internal recruitment procedures

Pros:

- "Procedure based" requirement which is easy for employers to understand and comply with (though still requires employer to coordinate among decentralized operations which DOC sees as principal objection to DPC/NEC proposal)

- From employer perspective, does not subject their termination decisions to second-guessing by the government through enforcement (only their post-lay off internal recruitment activities?)

Cons:

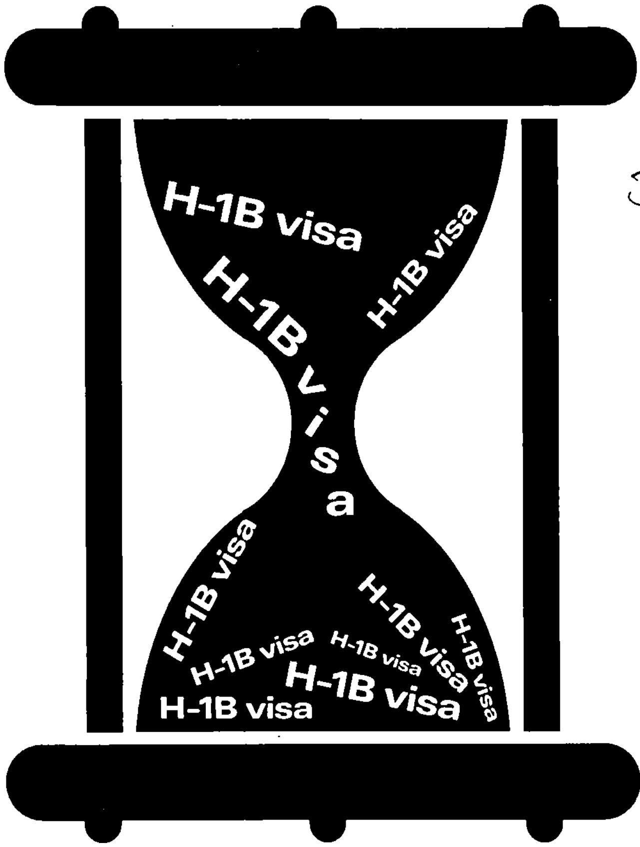
- Does not protect any U.S. worker – employee, contractor, etc. – from being terminated to be replaced by a foreign temporary worker

- "Procedure based" requirement does little to affect employers' behavior with respect to their U.S. workers by conditionally limiting access to foreign temporary workers

- May not require H-1B employers to do anything other than what they are already doing

- Still does not overcome DOC's principal concern that decentralized employers will have to coordinate among dispersed operations

In both cases, the basic issue is whether we want to affect employers' behavior with respect to U.S. workers as a condition of access to foreign temporary workers. DPC/NEC language would do so; DOC alternative (as understood) would not.



JF -
No pressure
though.
LS

Time is *running* out.

Congress has only a few weeks left to increase the number of "H-IB visas" U.S. companies can use to temporarily hire foreign professionals to fill the void in America's high-tech workforce. If the cap isn't raised by late-May, job vacancies will put critical work on hold or force it overseas. The U.S. could lose its edge in the global marketplace—and lose jobs.

Support Sen. Spencer Abraham's American Competitiveness Act (S.1723). It will raise the cap on the number of foreign professionals who can temporarily fill high-tech jobs while American workers train. And it will maintain U.S. leadership in world markets. American jobs depend on it—there's not much time.

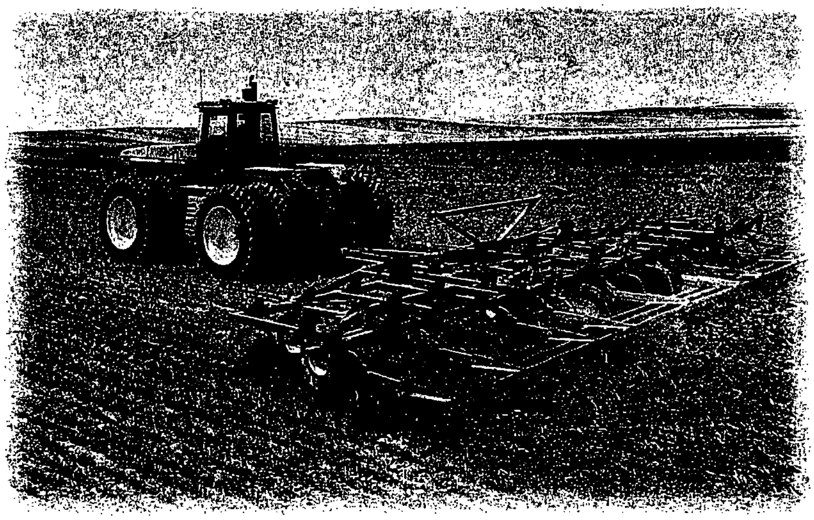
ABLI *American Business for Legal Immigration*

American Council on International Personnel
American Electronics Association
American Immigration Lawyers Association
Business Software Alliance
Computing Technology Industries Association
Electronic Industries Alliance
Information Technology Association of America
National Association of Manufacturers
National Technical Services Association
Semiconductor Equipment and Materials International
Small Business Survival Committee
Society for Human Resource Management
United States Chamber of Commerce

PASS THE AMERICAN COMPETITIVENESS ACT TODAY!

Some people are afraid of competition
and would rather remain in the past...

But, other people believe competition
is the path to progress.



H.R. 10 is The Path to Progress and
Future Economic Growth

Support H.R. 10

Types of Jobs?

Rogan: PHds, MAs

H1B intended as a way to "chace talent"

Want people w/specific skills (doesn't necessarily need a BA)

Intra-company transfer for training H1B ??? — can use J-VISA ~~for this~~.

Instead of education how about income qualifications (?)

Diversity w/in the industry

Concerns of user community:

* job classification
* qualifications

job contractor issue? → ~~ask job contractors~~ ~~to~~ ask employers to look to employees laid off by other companies before going to a job contractor.

: interview look @ skills of domestic workforce.

Jim Moran – Regional Skills Alliances
+ industry contribution

Regional PICS

Fee ?

Not a problem.

Dedicating it.

140K applications but only 65K

ITAA opposed permanent visas

mobility (of H1Bs)

%

Enforcement

Complaint driven

- qualified Amer. applying for a job and given to foreign worker.

WH Leg. Affairs

No "random strike force" by DOL

Diff. standards for employers who employ a large % of H1B.

$\boxed{10\%}$ → triggers

[Foreign students.
educated in U.S. university]

Industry does advanced educ. & training of those they hire from U.S. universities.

* Only those w/ 10% have to attest ?

SECTION C | TUESDAY | JANUARY 13, 1998 | SAN JOSE MERCURY NEWS

BUSINESS

C FC
| MARKETS
| HIGH TECH
| ECONOMY

OTHER N

Asian turn
■ East Asia's
turmoil claimed
Hong Kong fina
house Monday

Clinton opposes higher visa cap

■ High-tech needs: Focus on 'home-grown skills,' commerce chief says.

BY MIRANDA EWELL
Mercury News Staff Writer

The Clinton administration will not support an increase in the number of skilled immigrants permitted to work for the high-tech industry to help ease a worker shortage that business leaders say is reaching crisis proportions.

Secretary of Commerce William Daley called an increase in the current cap on H-1B visas "politically not feasible" at a national convocation on the information-technology workforce shortage held Monday in Oakland.

"We must focus on home-grown skills," Daley told the gathering of 300 industry leaders, educators and government officials, suggesting the solution will come in new partnerships between industry and education.

"In the new economy, businesses have to take on new responsibilities," Daley said. "Talk to the schools as you would talk to your suppliers. Schools supply your most important raw material."

> 'Talk to the schools as you would talk to your suppliers. Schools supply your most important raw material.'
> — William Daley

The role of government will be chiefly to "shine a spotlight on the opportunities that are there," Daley said.

The conference, which was organized by the Information Technology Association of America, the U.S. Departments of Commerce and Education, and the University of California-Berkeley, kicked off what business hopes will become a national dialogue on the need for more computer professionals. A

See IMMIGRANTS, Page 3C

Higher visa cap for skilled workers is opposed by Clinton

■ IMMIGRANTS

from Page 1C

bevy of government officials, including Education Secretary Richard Riley and Deputy Secretary of Labor Kathryn Higgins, joined Daley to voice concern about the problem but proposed no sweeping new initiatives.

The nation has 340,000 vacancies for information-technology workers, according to a recent study conducted by ITAA with Virginia Tech University. Daley said the Commerce Department released a new estimate Monday that the U.S. economy will generate more than 100,000 information-technology jobs each year for the next decade, at the same time that U.S. universities are expected to turn out 24,000 information-technology graduates yearly.

Daley said in an interview with the Mercury News that industry must concentrate on developing the human capital in the United States, perhaps by turning to segments of the workforce that traditionally have been overlooked by business, such as women, minorities and the disabled.

"Industry can't wait for government to come up with some solution," Daley said. "Politically that's not going to happen, in my opinion."

Silicon Valley business leaders, however, have said that increasing the cap on visas for skilled high-tech immigrants has become one of their top legislative priorities this year. Kate McGee, vice president of corporate affairs for Oracle, said industry would continue to lobby for such changes and called the commerce secretary's position "unfortunate."

Gale Fitzgerald, chief executive of CTG, an international information technology services firm, warned the gathering that the tech-worker shortage could cost the United States its leadership position in the technology field. Turnover rates in the industry range as high as 70 percent and salary increases are running 14 percent yearly as companies across the business spectrum compete for the small pool of available talent, Fitzgerald said.

Graham Spanier, president of Pennsylvania State University and chairman of the Presidential Advisory Board on Information Technology, urged colleges and universities to step up their participation in public policy debates on information-technology issues.

"The boundaries between campus, workplace and home are changing, even eroding," Spanier said. "We can no longer afford to sit on the sidelines."

Higgins, deputy secretary of labor, announced two initiatives — an $8 million electronic labor exchange that would coordinate an existing online job bank with an online talent bank, and a $3 million fund to support new projects to train unemployed workers in new skills for the information-technology industry. The Department of Labor and the Department of Education also are providing up to $6 million in grants for businesses that expand their involvement in school-to-work programs.

Even without any proposals for broad new initiatives, however, the convocation was a useful first step for articulating a key industry issue, said Paul Cosgrove, chief executive of the Claremont Technology Group, Inc. and a member of the ITAA executive board.

The convocation continues today with a luncheon address by Dr. Glenn Seaborg and case studies of partnerships between industry and schools.

The conference, which was organized by the Information Technology Association of America, the U.S. Departments of Commerce and Education, and the University of California-Berkeley, kicked off what business hopes will become a national dialogue on the need for more computer professionals. A

See IMMIGRANTS, Page 3C

— William Daley

...secretary's position unfortunate."

Gale Fitzgerald, chief executive of CTG, an international information technology services firm, warned the gathering that the tech-worker

The convocation continues today with a luncheon address by Dr. Glenn Seaborg and case studies of partnerships between industry and schools.

Now Hiring! If You're Young

NK 4/25 1/ C

By Norman Matloff

DAVIS, Calif.

Readers of recent reports about a shortage of computer programmers would be baffled if they also knew that Microsoft hires only 2 percent of its applicants for software positions. Even among those applicants whom Microsoft invites to its headquarters for interviews, according to David Pritchard, the director of recruiting, the company makes offers to only one in four.

You don't have to be a "techie" to see that such a low ratio, typical for the industry, contradicts the claims of a software labor shortage. If companies were that desperate, they simply could not be so picky.

The real story here is more profound: the rampant age discrimination in the industry. High-tech companies save money by shunning most midcareer programmers and focusing their hiring on new or recent college graduates, who are cheaper and can work lots of overtime.

As a result, careers in the programming field tend to be short-lived. According to a survey conducted by the National Science Foundation and the Census Bureau, six years after finishing college, 57 percent of computer science graduates are working as programmers; at 15 years the figure drops to 34 percent, and at 20 years — when most are still only in their early 40's — it is down to 19 percent. In contrast, the figures for civil engineering are 61 percent, 52 percent and 52 percent. As one industry executive stated a few years ago at a stockholders' meeting when asked about corporate downsizing, "The half-life of an engineer, software or hardware, is only a few years."

Those claiming a software labor shortage point to low unemployment rates, but such data have little relevance. A programmer who becomes, say, an insurance agent after failing to find programming work counts in the statistics as an employed insurance seller, not an unemployed software worker.

Nor do salary trends indicate a shortage. The average increase in wages for programmers in the past year was only 7 percent — and that figure is skewed upward by the lucky few with hot new software skills who command higher pay.

Employers justify shunting aside midcareer programmers on the ground that they lack skills in the latest software languages. Yet even if a programmer takes a course in, say, the new Java language, employers will still tend not hire him or her for a Java project. "Taking a course is just not going to work for a senior person, given his salary," said Maryann Rousseau, an employment agent. Why hire a retrained but more expensive 40-year-old when a cheaper new graduate is available?

Age discrimination in the computer industry.

And the skills issue is a red herring; any competent programmer, if given a chance to learn on the job, can become productive in a new software technology within a few weeks.

Nevertheless, the Information Technology Association of America, an industry trade group, is asking the Federal Government for financing to increase the number of students enrolled as computer science majors. The trade group also wants an increased quota of temporary work visas for foreign programmers, in spite of a Labor Department finding that abuse in the program, like paying foreign workers lower salaries, is rampant. From 1990 to 1996, employer applications for visas for foreign programmers mushroomed by 300 percent, even though software jobs increased by only 40 percent in this period.

College computer science enrollments exploded by 40 percent last year. But once word gets out that the half-life of a techie is only a few years, how many will see it as the fast track to money and success? □

Norman Matloff is a professor of computer science at the University of California at Davis.

//

Debunking the Myth of a Desperate Software Labor Shortage

Norman Matloff

footnote: Dr. Norman Matloff is a professor of computer science at UC Davis, and was formerly a statistics professor at that institution. He is also a former software developer in Silicon Valley. This document will be frequently updated, at http://heather.cs.ucdavis.edu/itaa.html See also the author's article on the same topic in the American Programmer, January 1998. Related information is available from the American Engineering Association, http://www.aea.org/aea/.

Department of Computer Science
University of California at Davis
(530) 752-1953
matloff@cs.ucdavis.edu

January 22, 1998

Overview and Executive Summary

``Vaporware.'' That is the term used in the software industry when a firm announces a new product which actually does not exist. Extending the term a bit, one can say that the industry's latest vaporware is the claim of a desperate software labor shortage. The fact is that there is no such shortage.

Due to an extensive public relations campaign orchestrated by industry trade organizations such as the Information Technology Association of America (ITAA), American Electronics Association,

footnote: Not to be confused with the American Engineering Association, which has rebutted the claims of a shortage.

and the National Software Alliance, a rash of newspaper articles have been appearing, claiming desperate labor shortages in the high-tech industries. Frantic employers complain that they can not fill many open positions for computer programmers. (We use the term programmer to include software developers having various job titles, including software engineers, system analysts and so on.

footnote: Many analyses of the software labor market place far too much emphasis on job titles among software developers. The fact is that the various titles are typically ``distinctions without a difference.'' For example, someone writing code for an automatic teller machine might have a Programmer title if he/she works for a bank, but if the bank outsources the same work, the same worker doing the same work might be called a Software Engineer or Computer Engineer. In our Computer Science Department at UC Davis, the support staff with Programmer titles would, for doing the same work, be called System Administrators by many other employers, and so on.

)

Yet readers of these articles would be perplexed if they also knew that Microsoft, for instance, only hires 2% of its applicants for software positions. One does not have to be a ``techie" to see the blatant contradiction here. If employers were that desperate, they would certainly not be hiring just a miniscule fraction of their job applicants.

Contrary to the claims of the industry lobbyists:

- There is no desperate software labor shortage. There are open positions, yes, but employers hire only a tiny fraction of their applicants for those positions.
- The allegedly ``desperate" employers are actually willing to hire only from three subgroups of the programmer labor pool:
  - New or recent college graduates, who are cheaper than established programmers.
  - Foreign nationals on work visas, who often work for lower pay.
  - Those few mid-career programmers who are fortunate enough to have work experience in a currently-``hot" programming language.
- It is not a ``seller's market." Most programmers are getting yearly salary increases similar to those of U.S. workers as a whole, rather than the huge pay hikes cited by industry lobbyists for certain narrow segments of the software labor market.
- The industry claim of a low unemployment rate for programmers is highly misleading. Employers typically shun the mid-career (age 35-55) workers, in favor of much less costly new or recent college graduates who have lower salaries, forcing many mid-career people out of the programming field. The former programmer who becomes an insurance agent counts in government statistics as an employed insurance seller, not an unemployed programmer, so unemployment rates do not give an accurate picture of the employers' general refusal to hire the mid-career workers.
- Contrary to the industry's image of employer desperation, employers automatically reject mid-career applicants unless they possess a very specific software skill, an unreasonable practice akin to what would happen if Chevy dealers refused to hire seasoned mechanics with experience on Fords.
- Contrary to claims made by the ITAA, university enrollment in computer science curricula has responded quite well to market demands.
- Employer hiring of foreign nationals, rather than being based on ``need," is often motivated by the fact that those workers will often take lower salaries.

Many critics believe that access to cheap labor---both in the form of foreign nationals and new college graduates---is the ``hidden agenda" behind ITAA's campaign to develop an image of a software labor shortage in the public consciousness. Though ITAA's Harris Miller has denied this in the case of foreign nationals ( Electrical Engineering Times, December 8, 1997), the ITAA has stated that its ``number one priority" in 1998 will be to push Congress to increase the yearly quota of H-1B work visas (San Jose Mercury News, November 21, 1997).

> footnote: See also the letter to the editor by William Archey, President of the American Electronics Association, San Jose Mercury News, January 18, 1998, calling for an increase in the H-1B quotas.

Even the data of the industry lobbying group, the National Software Alliance,

> footnote: Software Workers for the New Millenium, National Software Alliance, Arlington, VA, January 1998.

shows that the number of H-1B work visas requested by industry for computer programmers increased by 352% from 1990-1995, during which time the number of programming jobs increased by only 35%. Clearly, the H-1B issue is a powerful factor motivating the industry's recent public relations campaign claiming a labor shortage.

Similarly, savings in salary costs seem to be the motivation behind ITAA's (false) claim that university computer science enrollment is currently on the decline. As stated above, that enrollment does in fact respond to market demands, but since the industry has been focusing its hiring on the cheaper new and recent graduates, employers feel the larger that pool is, the better.

The fact is that the industry lobbyists are not doing right even by their industry constituents, because under current hiring policies the employers are shooting themselves in the foot:

> footnote: One might ask, ``How can the hiring policies of the industry be `wrong,' in view of the great success the industry has enjoyed?" The answer is that since most employers use the same hiring policies, a poor policy does not give any of them a competitive disadvantage. Moreover, the industry is not good at management, such as in assessing employee talent. Studies have shown that programmers who are twice as productive are paid only 10% more. (Peopleware: Productive Projects and Teams, by Tom DeMarco and Timothy Lister (Dorset House Publishing Co., 1987.)

- Employer obsession with skills is resulting in sharp increases in salaries within the very narrow segments of the software labor market corresponding to those highly-specific skills.

  > footnote: The lack of accounting for such employer pickiness on ``skills" is a central problem in a recent report by the Urban Institute, Skill Mismatches and Worker Shortages. In spite of the promising title, the report's quantitative analysis does not take into account the skills issue. For example, the Urban Institute authors express surprise that salary data from the Bureau of Labor Statistics do not show the big rise in wages found in surveys commissioned by the ITAA. Yet the reason for the discrepancy is that the ITAA-commissioned surveys specified jobs in which employer insistence on specific skills has led to large increases in salaries in those jobs. Numerous points throughout the Urban Institute report can be easily resolved in this manner.

  (Again, programmers outside of those narrow segments are not experiencing sharp increases in wages.)

  It is simply not cost effective to pay someone $10,000-15,000 more in salary simply because he/she knows Java, given that any competent programmer can learn Java and be productive in it within a couple of weeks.

  So employers are shooting themselves in the foot under their current policies.

- The fact that the industry pays a premium for certain skills is resulting in frequent job-hopping by programmers who are out to maximize their salaries. Employers say they place high value in finishing projects under deadline. Yet if a programmer who knows a project inside out suddenly leaves the employer in the lurch by jumping to another company, clearly this has a sharply adverse effect on the first employer's ability to complete the project on time.

  So here too, employers are shooting themselves in the foot under their current policies.

- By using unimportant skills as their resume'-screening criteria, employers are not using the criterion which far outweighs any other: General programming talent. The best way to ensure success of a software project---finishing under a short deadline, minimizing the number of program bugs, maximizing innovation and so on---is to hire talented programmers, not people with specific software skills.

  So again employers are shooting themselves in the foot under their current policies.

The fact is that although employers shun the mid-career programmers in favor of new college graduates and foreign nationals in an attempt to reduce personnel costs, if the employers were to utilize a more broad-based hiring policy, then their overall costs (not to mention headaches) would actually decrease.

There Is No Desperate National Shortage of Computer Programmers

There are a number of open positions, but employers are not willing to fill them with most programmers who apply for them, as can be seen from the extremely low percentages of applicants whom they actually hire, such as:

> footnote: Microsoft: Associated Press (Tacoma News Tribune), May 13, 1997; Deltanet: Patrick Schmidt, interview by the author, November 5, 1997; ECbridges: Raymond Lin, interview with the author, November 7, 1997; Flashpoint, Francine Beanan, interview with the author, October 31, 1997; Broderbund: Mary Bjornstad, interview with the author, October 31, 1997; American Management Systems: Washington Post, November 30, 1997.

Microsoft	2%
Deltanet	4%
ECbridges	2%
Flashpoint Technology	2 to 5%
Broderbund Software	1%
American Management Systems	2%

There is simply no room for argument here---these low hiring rates flatly contradict the industry claims of a desperate labor shortage. Indeed, the fact that employers can be so picky in their hiring demonstrates an oversupply of labor.

The situation is typified by the fussy John Otroba (Washington Post, November 30, 1997), who

> ... has no shortage of incoming resumes. When he logs onto his office computer every day, he has at least 50 in his electronic mailbox...But only about one in 12 resumes leads him to pick up the telephone to call the job seeker. Some don't pass that screening step. Of those who come in for an interview, fewer than a quarter are offered jobs [making an overall rate hiring rate of under 2%].

In other words, there is no shortage of ``bodies,'' i.e. there is no shortage of experienced computer programmers. The problem is that employers are not willing to hire them. Employers are only willing to hire from three narrow categories of programmers:

- New or recent college graduates, who have cheaper salaries.
- Foreign nationals on work visas, who have cheaper salaries.
- Programmers who have experience in certain highly-specialized software technologies.

It should be emphasized that tiny hiring rates seen above are for programming positions, not for, say, marketing jobs. In my own interviews, for instance, I was very specific in asking for rates for programming jobs.

The companies' resume'-scanning machines search for key words corresponding to currently-``hot'' skills desired by the employer. Any resume' lacking these words is rejected, untouched by human hands. The same is true for the employment Web sites set up by most companies in the industry, which filter responses based on skill sets and reject any applicant who lacks the given skills.

Moreover, the industry claims of a labor shortage are even more strongly contradicted by the fact that even among applicants who have the skills demanded by ``picky'' employers, few are made offers. Patrick Schmidt of Deltanet notes that programmer employment agencies will only refer an applicant to an employer if the applicant is an exact match to the skill set defined by the employer---and yet even then Schmidt says he hires well under 10% of such applicants, due to the large number of agencies which send him applicants. Microsoft recruiting head David Pritchard told ABC Nightline

> footnote: January 1, 1998.

that even among those applicants whom the firm invites to Redmond for an interview---again, those who have already been prescreened for skill matches, the firm makes offers to only about 25 percent of them. We saw the same low offer rate for American Management Systems above.

> footnote: Note that the Microsoft and American Management Systems rates of 25% are for offers, not hires. Thus the low rates cannot be explained away, for instance, by postulating that an applicant gets multiple offers but can only accept one.

Rampant Age Discrimination---at Age 35!

Mid-career programmers actually have a very difficult time finding programming work, so much so that large numbers of them leave the field.

There are two underlying factors here:

- Older workers often lack the most up-to-date software skills.
- Employers like to hire new or recent college graduates, because they work for lower salaries, and they generally are single and thus can work large amounts of overtime without being constrained by family responsibilities. Employers may also perceive that the new graduates have more modern skill sets, though this effect is limited.

  > footnote: The new graduates may know Java, for instance, but not TCP/IP, SAP or any of the literally hundreds of software technologies in use today. There is no way a college curriculum can teach them all.

Intel lobbyist Eva Jack conceded to Computerworld magazine (IEEE Computer, February 1996) that the firm often focuses its hiring policy on new graduates. Tim Jackson's book, Inside Intel (Dutton, 1997), provides a number of disturbing details:

- FACE Intel, an employee activist group, discovered last year that Intel policy had been that 70% of its hires would consist of new graduates.
- Intel has also been the defendant in several age-discrimination lawsuits, including by one of its top salesmen, 40-year-old Bill Handel, who Jackson reports ``was a great deal more expensive to keep than a newcomer only a few years out of college."
- Intel's policy apparently was instituted in response to a suggestion ``by management consultants who feared the company was aging too fast, [recommending] easing older employees out of the company and replacing them with younger ones."
- Craig Barrett, Intel's Chief Operating Officer, replied to a corporate downsizing question raised at a stockholders' meeting dismissively, commenting ``The half-life of an engineer, software, hardware engineer is only a few years..."

Intel's focus on new or recent college graduates is so intense that it even has a special acronym for the term, RCG (Recent College Graduate), which dominates its employment recruiting literature.

Employment agents tell the story clearly. Andrew Gaynor notes

footnote: Interview with the author, July 1, 1996.

that anyone with 10 or more years of experience without currently-``hot" skills ``is at a complete disconnect" in finding work. Susan Miller says

footnote: Interview with the author, June 26, 1996.

that former defense industry programmers ``are usually shunned by the industry. I get a tremendous number of resume's from them but I can't place them." Gaudi Lucca told the author in August 1997 that very few programmers with 10 or 15 years of experience but lacking current skills would be able to find programming work. And Kim Lee, of the Network Connections employment agency in the Silicon Valley remarked,

footnote: Interview with the author, June 26, 1996.

``In 1988 the employers would have retrained [mid-career] people but they're not desperate enough to do so today."

Many employers' insistence on hiring only programmers who have a specific software skill is sincere, though again, misguided since any competent programmer can learn a new software skill quite quickly. But for too many employers, especially the ones who lobby heavily in Congress, the skills issue is just a red herring, a pretext for avoiding the mid-career programmers and hiring cheaper workers. Age discrimination is rampant in the industry, as more and more employers focus their hiring on the cheaper new college graduates. We have seen this above for Intel, for instance. It has also been described for Microsoft. (The Microsoft Way, by Randall Stross, Addison-Wesley, 1996.) A hiring manager in a Silicon Valley firm who is a former UC Davis student told the author,

footnote: March 28, 1997.

> Well, I want to state that this is in my opinion not a good policy, but the top management in our company has directed us to focus our hiring on new or recent graduates only. These are people who have no family and can work long hours. Yes, salary is a major factor; that's what it boils down to. You work the young ones for five years and then replace them. I have objected to this, because I believe that many of our projects are being hurt by the fact that everyone is so inexperienced.

Prominent software project management guru Edward Yourdon comments, ``...a lot of [mid-career] programmers have disappeared---I've visited organizations that used to have 100 software people...then returned two years later to find that the staff had been reduced to a dozen younger and less expensive people." (The Rise and Resurrection of the American Programmer, Yourdon Press, Prentice-Hall, 1996.) He then notes that a major trend (in the computer applications realm) has been to replace mid-career workers with ``cheap, young C++ programmers."

A July 14, 1997 article in the Washington Times reported:

> Lockheed Martin Federal Systems of Gaithersburg...is working hard to nab its share of qualified graduates from area schools. By the end of this year the 2,300-employee defense contractor will have hired about 500 people, two-thirds of them recent college graduates. Next year the company, which focuses on computer systems integration, software development and technical systems for satellite navigation and surveillance, expects to hire the same number, but officials hope about 90 percent will be recent graduates.

The article then quotes NeuroSystems CEO Ed Robertson as to why the new graduates are so attractive: ``If we go out to the marketplace and find a 40-year-old software engineer, we'll have to pay that individual more."

One CEO (Bob Forman of IMI Systems) who heard me speak on this subject approached me after my presentation and said, quite angrily, ``You are wrong that the industry does not hire mid-career people who don't have hot skills. My company is anxious to hire as many programmers as it can get."

> footnote: Forman is also quoted in a similar comment in Computerworld, January 19, 1998.

I then proposed that my wife, a software engineer with 15 years of experience, send his company her resume', and that if the resume' were rejected without an interview, I use his firm as an example in my future writings on this topic. He quickly backpedaled, saying that my wife's resume' might be rejected because the firm perceives that her salary is too high. My reply was that this indeed is the problem. The industry claims there is a shortage of workers when what they really mean is that there is a shortage of cheap workers.

As a result, most careers in the programming field are short-lived. Below are data, extracted from the National Survey of College Graduates in 1993, showing the percentage of computer science graduates working in software development various numbers of years after they finish school:

```
yrs after degree   % working as progrs

      6.5               57%
      8.5               57%
     10.5               47%
     12.5               42%
```

14.5	37%
16.5	34%
18.5	29%
20.5	19%

Five years after finishing college, about 60 percent of computer science graduates are working as programmers; at 15 years the figure drops to 34 percent, and at 20 years---when most are still only age 42 or so---it is down to 19 percent. Part of this attrition is voluntary, but most are forced to seek other work when they see the handwriting on the cubicle wall: Employers do not want to hire mid-career programmers.

> footnote: As noted earlier, because people who cannot find programming work leave the field, unemployment statistics for programmers are meaningless.

It should be noted that other technical fields do not show this rapid decline of work in their field. For example, consider civil engineering majors. Six years after graduation, 61% of them are working as civil engineers, and 20 years after graduation, the rate is still 52%. So, careers in programming are far shorter than in civil engineering, even though both fields are technical and require attention to detail. The difference is that skill sets change rapidly in programming, but not in civil engineering. And again, it is not that programemrs are incapable of acquiring the new skills, but rather that the employers won't give them that chance.

Such policies have spawned a cottage industry in self-help books for programmers who find that they are no longer desired by employers, such as The Computer Professional's Survival Guide, Downsized But Not Out: How to Get Your Next Computer Job and The Programmer's Job Handbook: The Skills You Need for Long-Term Job Security and Programming Success.

University students are beginning to be aware of this problem, and though computer science enrollment trends are currently on the upswing (more details below), in the future this may deter many of them from pursuing computer science majors. An article in the January 13, 1998 edition of the New York Times says that

> [current Stanford computer science student Graham Miller] is already thinking about an exit strategy [from the computer field]. ``Programmers only last up to 10 years or so,'' Miller said. ``After that, you need to find something else to do.''

It is crucial to keep in mind that the plight of the mid-career programmer cannot---I repeat, CANNOT---be solved simply by the programmer taking some refresher courses in the new software skills. Even if a programmer takes a course in, say, the new Java programming language and then applies for a job requiring Java, employers will still not hire him or her. As noted by software employment agent Maryann Rousseau, ``Taking a course is just not going to work for a senior person, given his salary.'' Why hire a newly-retrained but more expensive 40-year-old when a newly-trained cheap new graduate is available?

Trends in University Computer Science Enrollments

The ITAA claims computer science enrollments are declining, and is calling on the federal government to fund programs to attract more college students to the field. But ITAA's assertion is so misleading as to border on fraud.

The ITAA report lists declining computer science enrollments from the late 1980s to 1994. But computer science enrollment reversed its declining trend in 1995, increasing by 5% in 1995-1996, and by a whopping 40% nationwide in 1996-1997, according to the Computing Research Association (CRA), a national consortium of university computer science departments.

footnote: Computing Research News, March 1997.

This information was conveyed to ITAA's Harris Miller and Tony Vickers by a CRA official when ITAA distributed a preliminary draft of their report at a roundtable discussion organized by the Stanford Computer Industry Project on February 19, 1997. Though ITAA stated at the time that they were soliciting comments and suggestions for improving their report, they did not include this information about the sharp increase in computer science enrollment in the final version of the report, apparently because it undermines their argument. In fact, ITAA continued to claim enrollment is declining,

footnote: San Francisco Chronicle, January 8, 1998.

even after ITAA's suppression of the 1995 reversal trend was brought up in an interview with ITAA by the Electronic Engineering Times (September 29, 1997).

Moreover, even industry representatives (including ITAA) interviewed by Business Week (March 10, 1997) blamed the earlier decline in enrollment partly on ``a glut of programmers in the mid-1980s." The recent increase in enrollment is due to the rapid expansion of the industry which began around 1994. In other words, the market's working, Mr. Gates, so what's your problem? The problem of course is that Gates and many other CEOs focus their hiring on the cheaper new graduates, so the larger the pool the better.

The industry lobbyists also say that college computer science curricula are only producing 25% of the nation's needs for programmers, again claiming this is due to a decline in enrollment. But it has always been the case that programmers have always come from many different fields, not just computer science. For instance, according to the National Science Foundation's SEASTAT data, only 26% of all those working as programmers in 1993 had computer science degrees.

It should also be noted that most firms recruit at only a few colleges. For example, at San Francisco State University, right in Silicon Valley's back yard, only a handful of computer industry employers do on-campus recruiting.

footnote: Interview by the author with the Computer Science Department Chair, June 1996.

Even Intel, with its heavy emphasis on new or recent college graduates, does not recruit there.

footnote: Meeting with Intel college-relations staff, January 1997.

At the University of Nebraska, Microsoft does engage in on-campus recruiting, but very few other high-tech firms do.

footnote: Discussion with the department chair, 1997. Microsoft recruits at many more schools than do most firms, but still misses most of them. The firm did not add my university, UC Davis and another UC campus at Irvine, to its list until late 1995, according to Beth Award of Microsoft College Recruiting.

Salaries

In very narrow segments of the programmer labor market, salaries are indeed very high. As stated earlier, employers are overdefining job requirements, with ads like ``Must have experience writing C++ code for TCP/IP applications on SPARC platforms." The pool of programmers satisfying such conditions is of course small, thus raising salaries for those within that narrow pool.

However, outside of these subsegments, programmer salaries are not rising rapidly. Bureau of Labor Statistics data show that salaries of programmers *overall*---i.e. both the ones who have currently-``hot" skills and the ``ordinary" programmers---rose about 7% from 1996 to 1997, compared to about 3% for all American workers. Again, this overall 7% figure *includes* the programmers who are commanding a high salary because they know a new language like Java; so we can see that the salaries of ``ordinary" programmers are not rising much, if at all.

On Skills Requirements

Employers claim, ``We cannot hire `just any programmer.' It is crucial that the programmer have experience in a specific software technology." But this is quite incorrect. What counts is general programming talent, not experience with specific software technologies.

Bill Gates has described Microsoft hiring criteria thusly: ``We're not looking for any specific knowledge because things change so fast, and it's easy to learn stuff. You've got to have an excitement about software, a certain intelligence...It's not the specific knowledge that counts." (Wall Street Journal, November 8, 1994.)

Jim McCarthy, one of Gates' software development managers at Microsoft, points out in his book, Dynamics of Software Development (Microsoft Press, 1995, p.168),

> The biggest mistake I see managers make as they hire people for software development teams is that they overvalue a particular technology. To verify this tendency, all you have to do is look at the want ads: `Wanted: foobar programmers. Experience with whatsit required.' Obviously, conversance with a given technology is a wonderful attribute in a candidate, but in the final analysis it's an extra, not mandatory. After all, most software development technologies have a half-life of about one year.

Ironically, Microsoft has grown so large that Gates' and McCarthy's philosophies don't reach down to the shop floor, and managers there are now just as obsessed with skills as the rest of the industry. The first demand made of users accessing Microsoft's employment opportunities Web page (and those of most other software firms) is ``State your skill set."

Programmers can become productive in a new software technology in a month or so. A programmer who already knows C, the industry standard for the last 15 years, can pick up a Java book on Monday and be writing programs by Friday, and feel like an old pro in Java by the end of the month.

This point on the quickness with which new software technologies are learned can be seen in data on factors affecting completion time for software development projects, cited in one of the central works on software engineering, Software Engineering Economics, by Barry Boehm (Prentice-Hall, 1981, p.530). Those data indicate that programmers reach perhaps 80% of their full productivity level by one month, and full productivity by the next time period studied, four months.

Amit Kamra, head of Information Systems Transition Services, said that his company could not afford to hire someone who would have to learn the given technology on the job, say Microsoft Windows programming.

footnote: Interview with the author, August 24, 1995.

But when I asked him how long it would take for an experienced programmer to become productive in Windows if he/she did not know this technology beforehand, he answered, ``[Up] to two weeks, maybe all the way up to a month and a half to become truly productive." I asked why they did not hire such people, given the shortness of such time periods, to which Kamra replied, ``Well, we could, and we did so once with good results [he then gave the details]...But well, during those two weeks [of learning] the project is slowed down a bit, especially since others on the project would have to help the new person." Though Kamra's remarks show that learning on the job is of course not ideal, the point is that they certainly show that the industry is wrong in claiming that possession of specific skills is an absolute necessity.

Note that the Boehm reference and the Kamra quote above, as well as numerous others in my long Web document referenced earlier, demonstrate that programmers in general learn quickly, not just the programmer ``superstars."

On the General Unwillingness of Employers to Retrain Mid-career Programmers

After Senator Alan Simpson introduced his 1995 bill to tighten up our policy on high-tech hiring of foreign nationals and employers protested that they need the foreign workers to fill a software labor shortage, Secretary of Labor Robert Reich stated that the problem was that employers are not retraining their existing employees, industry officials protested that they do spend vast sums of money on retraining.

However, the fact is that most employers are not willing to retrain their programmers and engineers. As mentioned earlier, Kim Lee, of the Network Connections employment agency in the Silicon Valley has noted that

footnote: Interview with the author, June 26, 1996.

``In 1988 the employers would have retrained [mid-career] people but they're not desperate enough to do so today."

The point was made quite forcefully by Susan Miller, a computer industry employment agent who says that 90% of the workers she places are foreign nationals.

footnote: Interview with the author, June 26, 1996.

Pointing out frankly that her own high income as an employment agent depends largely on the fact that the industry is not providing retraining for existing employees, she nevertheless feels that

> It's a very closed industry in that respect [retraining]. The trap the industry falls into is that they don't spend time retraining. It would be much more cost-effective for them to retrain the employees they already have; by not retraining they are driving salaries way up, since so few people have the ``right" skill sets. The employers haven't been smart. They have been very closed-minded, with blinders. If I could change one thing about the industry, that would be it.

Andrew Gaynor, another employment agent, called the industry ``very short-sighted" in this regard.

footnote: Interview with the author, July 1, 1996.

The industry often says it cannot afford the time to retrain, because they need to hire personnel for a project immediately. But this is disingenuous, as the industry is also claiming that as many as 30% of software positions take six months or more to fill.

footnote: Wall Street Journal, December 1, 1997.

During this time the same programmers employers are unwilling to hire now because of lack of a hot skill could learn the given technology and be productive.

A good example of industry's lack of willingness to retrain was given by Joyce Plotkin of the Massachusetts Software Council (MSC),

footnote: National Information Workforce Technology Convocation, Oakland, California, January 13, 1998.

citing a laid-off computer engineer who had applied for a job with the Lotus software firm. Lotus had rejected the man when he had applied for a job on his own, but MSC asked Lotuscw to who put him on a training project. The company eventually hired him and is quite pleased with his work. Plotkin said that Lotus ``had its eyes opened'' by this case, and now is an enthusiastic supporter of MSC. This is an excellent example of how the industry is shooting itself in the foot with its overly-narrow hiring policies.

The industry also says that if they retrain their programmers in a ``hot'' skill, the newly-enfranchised programmers will leave them for higher pay elsewhere. This is correct, but the employers are missing the point: If the industry did not pay a premium for these skills in the first place (a consequence of refusing to hire programmers who lack the skills), this frequent job-hopping would not occur.

As pointed out earlier, programmers seeking work cannot remedy the problem by retraining on their own. Employers will not hire a mid-career programmer for a Java project on the basis of the applicant's having taken a Java course.

The Role of Imported Workers

As we have seen, industry employers tend to shun mid-career programmers. One of the major factors underlying this is that employers have another labor source to turn to, in the form of foreign nationals whom they sponsor for immigration or work visas. For example, about one-third of Silicon Valley programmers and engineers are foreign-born, most of them sponsored originally by employers.

Without the foreign-national labor supply, employers would be forced to use the existing domestic labor pool of mid-career people. For this reason, the foreign-labor issue is central to our theme here, and will be addressed briefly. (See the author's analysis at http://heather.cs.ucdavis.edu/svreport.html for extensive details.)

Many employers find foreign-national programmers and engineers attractive because they will accept lower salaries and poor working conditions. The Department of Labor has found widespread abuse of the work-visa program.

footnote: The Department of Labor's Foreign Labor Certification Programs: The System is Broken and Needs to be Fixed, Final Report No. 06-96-002-03-321, Joseph Fisch, Assistant Inspector General for

Audit.

General Dynamics, the aerospace giant, even admitted in federal court that the imported workers were presented as attractive due to their ``indentured" status.

Professor Paul Ong of UCLA, a prominent immigrant advocate, after correcting for a host of important variables---including English proficiency---found that immigrant engineers were paid up to one-third less than their native counterparts, and that the gap took 20 years to close.

footnote: The State of Asian Pacific America, Paul Ong (ed.), LEAP Asian Pacific American Public Policy Institute and UCLA Asian American Studies Center, 1994, p.179-180. The article is reprinted in New American Destinies, D. Hamamoto and R. Torres (ed.), Routledge, 1997.

And though Ong hypothesized various factors, he noted that ``Companies took advantage of immigrants."

footnote: Electronic Engineering Times, July 18, 1994.

The author's own analyses of the 1990 Census data on programmers and electrical engineers in Silicon Valley found that the immigrants were paid on average 15-20% less than natives of comparable age and education. Abuses also occur abroad; Sun Microsystems, a firm often cited by ITAA analyst Stuart Anderson as paying fair wages to foreign nationals, has boasted of hiring programmers in Russia at ``bargain prices."

footnote: Los Angeles Times (November 15, 1993, and also July 15, 1996.

It is ironic that even a Wall Street Journal article

footnote: January 8, 1998

claiming that American firms recruit abroad because of a labor shortage stated that ``recruiting foreign talent is cheaper than hiring Americans." The article's figures indicate that the foreign recruits are paid 25-30% less than Americans with the same skills.

As noted earlier, even the data of the industry lobbying group, the National Software Alliance, shows that the number of H-1B work visas requested by industry for computer programmers increased by 352% from 1990-1995, during which time the number of programming jobs increased by only 35%. The industry's goal of convincing Congress to increase, or even eliminate, the yearly cap on H-1Bs appears to be a major motivation behind the industry's recent public relations campaign claiming a software labor shortage.

footnote: The industry lobbyists say it actually costs them more to hire the foreign nationals because of the legal fees involved. But many employers have the H-1B emmployees pay the legal fees themselves, and even when employers foot the bill, the cost is less than they save in salary.

[Converted LaTeX --> HTML by ltoh]
Russell W. Quong (quong@best.com) Last modified: Jan 22 1998

ROUTING AND TRANSMITTAL SLIP Date 1/21/98

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. ~~Jim Atkin~~ KH		
2.		
3.		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate	X	For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

San Francisco Business Times editorial — based on visit by Kitty Higgins & Secretaries Riley and Daley to the ITAA conference. The editorial disputes their argument that we should not import more foreign workers for high-tech jobs.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
Al Belsky	Phone No.

5041-102

☆ U.S.G.P.O.: 1993 342-198/80007

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

OPINION

EDITORIAL

Want high-tech talent? Look near, and far

A heavyweight trio of Clinton administration officials arrived in the Bay Area this week to help the high-tech industry tackle its hiring crisis. They came bearing a few good ideas and a little money; unfortunately, they left their political courage back in Washington.

It's by now painfully obvious to everyone in the technology industry that there is a desperate shortage of skilled and qualified workers at almost every level. Within the industry, it's equally well known what can be best done about it, at least in the short term: relax the government's outdated limits on the number of foreign workers tech companies are allowed to hire.

Behind the visiting officials' hype over new federal grants for Internet job-matching services and more training for the unemployed, they were here to deliver a gloomy message. Those limits aren't going to be raised anytime soon.

It's not entirely fair to blame the messengers, Education Secretary Richard Riley, Commerce Secretary William Daley and Deputy Labor Secretary Kathryn Higgins. It's the president, who happily courts money and support from the technology industry, who has indicated his administration is unwilling to pick up this political hot potato on the industry's behalf.

Guest workers continue to be lumped with undocumented workers as part of our "immigration problem."

None of this holds the slightest bit of water — and the government knows it. About 40 percent of the 65,000 foreign "guest workers" admitted to the country each year are employed in information technology. Largely holders of Ph.D.s or other advanced degrees in arcane areas of mathematics or computing, they supplement rather than replace U.S.-born programmers and analysts. Nothing against American workers, tech companies say: There just aren't enough of them.

Indeed, the government's own figures estimate that the economy will generate 100,000 information technology jobs a year for the next decade, more than four times the annual number of information technology graduates U.S. universities will produce. Starving the technology industry of its key raw material — brainpower — is likely to kill jobs for Americans rather than create them.

No matter. Rather than stand up to misinformation, the administration prefers to give in to it, all to avoid the risk of being seen as "soft" on immigration. The next time President Clinton shows up to pass the hat in the Bay Area, perhaps the industry will show some courage of its own. ■

ETS
TECH
OMY

BUSINESS

OTHER N

Asian turn
■ East Asia's e
turmoil claimed
Hong Kong fina
house Monday

Clinton opposes higher visa cap

High-tech needs:

Focus on 'home-grown skills,' commerce chief says.

BY MIRANDA EWELL
Mercury News Staff Writer

The Clinton administration will not support an increase in the number of skilled immigrants permitted to work for the high-tech industry to help ease a worker shortage that business leaders say is reaching crisis proportions.

Secretary of Commerce William Daley called an increase in the cur- cap on H-1B visas "politically not feasible" at a national convocation on the information-technology workforce shortage held Monday in Oakland.

"We must focus on home-grown skills," Daley told the gathering of 300 industry leaders, educators and government officials, suggesting the solution will come in new partnerships between industry and education.

"In the new economy, businesses have to take on new responsibilities," Daley said. "Talk to the schools as you would talk to your suppliers. Schools supply your important raw material."

'Talk to the schools as you would talk to your suppliers. Schools supply your most important raw material.'

— William Daley

The role of government will be chiefly to "shine a spotlight on the opportunities that are there," Daley said.

The conference, which was or- d by the Information Technology Association of America, the U.S. Departments of Commerce and Education, and the University of California-Berkeley, kicked off what business hopes will become a national dialogue on the need for more computer professionals. A

See IMMIGRANTS, Page 3C

Higher visa cap for skilled workers is opposed by Clinton

■ IMMIGRANTS

from Page 1C

bevy of government officials, including Education Secretary Richard Riley and Deputy Secretary of Labor Kathryn Higgins, joined Daley to voice concern about the problem but proposed no sweeping new initiatives.

The nation has 346,000 vacancies for information-technology workers, according to a recent study conducted by ITAA with Virginia Tech University. Daley said the Commerce Department released a new estimate Monday that the U.S. economy will generate more than 100,000 information-technology jobs each year for the next decade, at the same time that U.S. universities are expected to turn out 24,000 information-technology graduates yearly.

Daley said in an interview with the Mercury News that industry must concentrate on developing the human capital in the United States, perhaps by turning to segments of the workforce that traditionally have been overlooked by business, such as women, minorities and the disabled.

"Industry can't wait for government to come up with some solution," Daley said. "Politically that's not going to happen, in my opinion."

Silicon Valley business leaders, however, have said that increasing the cap on visas for skilled high-tech immigrants has become one of their top legislative priorities this year. Kate McGee, vice president of corporate affairs for Oracle, said industry would continue to lobby for such changes and called the commerce secretary's position "unfortunate."

Gale Fitzgerald, chief executive of CTG, an international information technology services firm, warned the gathering that the tech-worker shortage could cost the United States its leadership position in the technology field. Turnover rates in the industry range as high as 70 percent and salary increases are running 14 percent yearly as companies across the business spectrum compete for the small pool of available talent, Fitzgerald said.

Graham Spanier, president of Pennsylvania State University and chairman of the Presidential Advisory Board on Information Technology, urged colleges and universities to step up their participation in public policy debates on information-technology issues.

"The boundaries between campus, workplace and home are changing, even eroding," Spanier said. "We can no longer afford to sit on the sidelines."

Higgins, deputy secretary of labor, announced two initiatives — an $8 million electronic labor exchange that would coordinate an existing online job bank with an online talent bank, and a $3 million fund to support new projects to train unemployed workers in new skills for the information-technology industry. The Department of Labor and the Department of Education also are providing up to $6 million in grants for business that expand their involvement in school-to-work programs.

Even without any proposals for broad new initiatives, however, the convocation was a useful first step for articulating a key industry issue, said Paul Cosgrove, chief executive of the Claremont Technology Group, Inc. and a member of the ITAA executive board.

The convocation continues today with a luncheon address by Dr. Glenn Seaborg and case studies of partnerships between industry and schools.

TOTAL P.02

Computerworld
January 26, 1998

The numbers game

Rochelle Garner & David Weldon

350,000 vacant IT jobs! A 40% drop in IT grads! 1.3 million more IT workers needed in the next decade! Where do they get these numbers? In a two-part series, Computerworld looks at the alarming predictions about the IT workforce and explains what the numbers really mean.

They say numbers don't lie. And on the face of it, the numbers are downright dire.

This year alone, 346,000 IT-related jobs will remain unfilled, says the Information Technology Association of America (ITAA).

The demand for trained workers is increasing by 95,000 IT jobs per year, according to the U.S. Bureau of Labor Statistics. And between 1994 and 2005, U.S. businesses will generate a demand for more than 1.3 million additional information technology professionals, says the Labor Bureau.

The Department of Education reports that the number of students graduating with bachelor's degrees in computer science declined more than 40% between 1986 and 1994.

Now comes the truly scary part: That gap will cost U.S. businesses $500 billion per year in lost revenue, $10 billion per year in lost business income and $15 billion per year in compensation, according to Howard Rubin, a consultant and chairman of computer science at Hunter College, in Pound Ridge, N.Y. That's because, for every dollar spent on information systems salaries, a company can expect to generate $43 in revenue, he says. Under that assumption, a company could lose $2.4 million per year for each IS pro it can't hire, Rubin's math suggests.

Gee, no wonder so many people representing the state and the federal governments and the IT industry are running around like extras in a disaster movie.

There is just one problem: This particular set may be built on a foundation of flawed assumptions, presumptions, old or incomplete data and extreme leaps of faith. Which isn't to say that the skills shortage isn't real -- it is, by all accounts. But this future blockbuster could turn into a major bust. That's why it pays to examine just where these folks get their numbers.

IT demand for jobs vs. supply of workers

Let's start with the ITAA figures that show workforce demand. The ITAA is the political lobbying association that represents 11,000 technology businesses. Its 1997 report, "The IT Workforce Gap at the Dawn of a New Century," says companies face a 190,000-person shortfall in the IT field. Since the report was released, the ITAA has doubled that figure to 346,000 in its updated study, "Help Wanted: A Call for Collaborative Action for the New Millennium," prepared by Virginia Polytechnic Institute and State University.

The report received immediate attention and was cited by news organizations around the country earlier this month. Suddenly, the heads of the U.S. departments of labor, commerce and education were being summoned to speak before journalists on the growing "crisis."

How did the ITAA get its numbers? In 1997, it sent out 2,000 surveys to a random selection of its members and collated 271 responses. And for the new study, Virginia Polytechnic conducted telephone interviews with 532 IT vendor and IT user companies.

The return rate or survey base isn't statistically suspect in either report, but the way the ITAA expanded the results to represent 103,607 technology and nontechnology companies is. Both polls represent no more than one-half of 1% of IT organizations, according to ITAA numbers. And if at the surveyed companies the IT staffs were small overall, the number of "core IT" jobs ITAA is tracking would be small. Job vacancies that show up would appear to be very high vacancy rates and would be projected outward to represent the entire IT workforce.

And the Labor Bureau's belief that U.S. businesses will crave more than 1 million computer engineers, systems analysts and computer programmers by 2005? That seems more likely, considering the bureau's ability to rigorously measure nearly everything under the

U.S. sun. But there's a catch: The labor group gleaned its data by polling the nation's private and public sector for projected growth at a time when the U.S. economy and IT industry have never been stronger.

Now consider a similar study, reported in 1993 by the National Science Foundation's Ad Hoc Working Group on science, engineering and mathematics professionals. The report's conclusion: "It is not entirely possible, and will probably never be possible, to predict with a high degree of accuracy ... shortages on surpluses of scientists and engineers several years into the future. Limitations on projections are especially severe for demand, since demand is a function of the economic cycle and of global events that are difficult, if not impossible, to predict."

Clearly, there's a presumption that this unprecedented growth will continue unchecked. But things change, as evidenced by the seemingly unstoppable downsizing in the early 1990s. That's the premise behind the criticisms leveled by the American Engineering Association and Institute of Electrical and Electronics Engineers, Inc. (IEEE). Both groups charge the ITAA with the political agenda of convincing the government to eliminate the 65,000-person cap on H-1B visas for qualified foreign labor.

Foreign labor

Foreign national workers

65,000 foreign national professionals can be sponsored by U.S. companies each year.

The annual cap of 65,000 H-1B visas was reached for the first time Aug. 25, 1997.

Labor crisis or not, companies are experiencing a serious skills shortage. That explains why the ITAA is so hot on its campaign to increase the number of H-1B work visas issued to skilled foreign nationals.

"We have made this our No. 1 priority," Susan Marshall, ITAA's vice president of information services, told the San Jose Mercury News.

Salaries

One thing is certain, though: Salary and compensation costs are on the rise. How high they'll rise is open to debate. Computerworld's latest annual salary survey indicates annual salary increases averaging 9% for IT professionals. The ITAA maintains that salaries are increasing by 20% to 28%. How to explain the discrepancy?

One way might be to examine who exactly is being polled. Computerworld, for example, primarily surveys the users of technology (such as corporate IT professionals), not providers of technology products and services (such as vendor IT professionals, contractors and consultants). The ITAA's constituency is technology business.

Rising enrollments in IT degree programs

Now examine the gap between supply and demand. According to the U.S. Department of Education, the number of bachelor's degrees in computer science dropped 40% from 1986 to 1994.

"We have no reason to believe that trend will change," says John Sargent, co-author of the Department of Commerce's report, "America's New Deficit."

Perhaps. And yet, when you combine the number of bachelor's degrees with the number of master's degrees and doctorates awarded, the overall decline has been only 26%. What's more, this trend statistically began to increase in 1992 and has increased every year since.

SUPPORTING EVIDENCE

Anecdotal evidence also indicates that IT enrollments have been rising dramatically over the past two years.

Universities around the country began to report sizable jumps in computer science department enrollments. Some of the leading IT colleges say their IT enrollments are up 25% to 40% this year.

And principal academic speakers at the ITAA's national workforce convocation on Jan. 12-13 took issue with the claim of declining enrollments. Confirming that IT enrollments have skyrocketed were Dr. Stuart Lynn from the University of California at Berkeley, Norman Matloff from the University of California at Davis and Dr. Graham Spanier from Penn State University, in University Park, Pa.

By itself, the measure of computer science graduates is an easy yardstick that signifies little. Universities now offer as many as two dozen different IT-related degrees -- from management information systems and library science, to software quality.

Computerworld contacted 10 of the leading IT university programs and found 24 noncomputer science -- but IT-related -- degrees being offered.

Equally important, most current IT workers earned their degrees in unrelated fields, such as business or even psychology. According to the National Science Foundation, only 29% of all computer scientists, systems analysts and programmers now working actually received a degree in computer science. A full 35% earned bachelor's degrees in engineering or other natural sciences.

Other IT professionals received degrees in liberal arts or other fields, and many others have no science-related degrees.

"The ITAA and Commerce Department wanted evidence to support the panic that terrible things are going on," says Cliff Adelman, a senior research analyst at the Department of Education. "Lots of people graduate in fields other than computer science."

Training

According to the IEEE, the answer to the skills shortage lies in the ready pool of retirees and laid-off workers who can learn information technologies fast.

"Last year saw 380,000 corporate jobs cut," says Shankar Lakhavani, chairman of the IEEE Workforce Committee. "Let's say, for the sake of argument, that 15% of those people were technical, or at least possess a logical mind. That's 57,000 people a year who can be trained easily and rapidly in IT."

That's trained in-house, of course. Once again, the ITAA has figures, only this time it cites a National Association of

Manufacturers report. The report's conclusion: U.S. companies spend more than $210 billion per year on workforce training.

There seems to be no disagreement that this training spending will increase dramatically.

Conclusion

Still, no matter how you slice it, IT workers are moving on at 25% turnover rates - or worse. They leave for better pay and better working conditions. Dominique Black, CEO of Advanced Technology Staffing, in Redwood Shores, Calif., says many IT workers have gone independent.

"We estimate that 800,000 of the total 2.5 million IT workforce are contract workers," Black says, Qo one really knows, because no one tracks that information at a sufficient level of detail, he says. "We are moving to a free-agent nation."

Many employers consider jobs filled by contractors as "vacancies," a fact confirmed by participants at this month's ITAA convocation.

What do these numbers mean? The only sure answer is that the nation's IT workforce is changing so fast it will soon be unrecognizable. Whether we are on the cusp of a crisis, at a dramatic transformation or something in between will be explored next week.

The President's Crime Prevention Council
Fax Transmittal Sheet

DATE:

PAGES: (INCLUDING COVER)

TO: JULIE FERNANDEZ

FAX: 6 5581

PHONE:

FROM: S. WARNATH

FAX: 202-395-5567

PHONE: 202-395-5555

MESSAGE:

FYI

736 Jackson Place, N.W., Washington, D.C. 20503

COMMENTS BY: STEPHEN WARNATH

DISCUSSION DRAFT

Need new subject header because you are not presenting options that all raise the cap.

February 2, 1998

MEMORANDUM FOR:

FROM:

SUBJECT: Options for ~~Raising~~ Addressing the H-1B Cap and Reported Skill Shortages in the Information Technology Industry.

The current cap of 65,000 visas for temporary skilled nonimmigrant workers under the H-1B program, met for the first time in FY 1997, is likely to become a legislative issue in this session of Congress. The Information Technology (IT) industry, along with key members of Congress, support either the removal or a significant increase in the H-1B cap, while unions and other worker organizations are likely to be opposed to any increase.

The Administration has proposed reforms of the H-1B program, but these reforms have not been enacted. The proposed reforms -- requiring a labor market test for U.S. workers (prior to auth the issuance of the temp. visa), prohibiting the displacement of U.S. workers to make room for temporary foreign workers, and reducing the maximum stay for H1-B workers from 6 to 3 years -- have been reserved in our GATT negotiations for the current program. Other reforms however, could be applied to any ~~increased~~ additional visas that would result from an increase in the cap.

The purpose of this memo is to provide options on the issue of raising the H-1B cap, including the reconsideration previously proposed Administration reforms. We have had preliminary discussions on this issue with Hill staff, organized labor and representatives from the business community and believe that certain ~~elements of~~ actors w/in the IT industry might be willing to ~~strike a deal.~~ accept. (or live with not strike a deal)

Labor Markets and Skill Shortages

It should remain in focus that these are temporary visas.

Demands for ~~an increased~~ increasing the H-1B cap arise from tight labor markets and press reports of widespread IT skill shortages. Increases in temporary visas immigration, however, should not be the principal -- and in some cases may not be an appropriate -- response to ~~short-term~~ industry skill shortages.

Tight labor markets are desirable because they create incentives for employers and workers to behave in ways needed to achieve many of your priorities, including welfare-to-work, displaced workers, school-to-work, lifelong learning and reducing wage and income inequality. Tight labor markets create incentives for employers to raise wages, improve working conditions and provide increased training; they induce workers to finance their own education and training; and they induce educational institutions to teach new skills. Tight labor markets and short-term skill shortages, ~~if ameliorated by rising wages and improved working conditions,~~ will ~~provide the~~ signal the market ~~signals needed to~~ to increase education and training. This in turn will allow workers to acquire skills needed to obtain new and better jobs, thereby creating open jobs and career ladders for those just entering or reentering the labor market -- young people, welfare recipients, displaced workers and other disadvantaged groups.

SS

Nonetheless, increased temporary immigration may be an appropriate response for critical skill shortages if the labor market is particularly slow to respond. Even in such a circumstance, however, the use of temporary immigration ~~makes it more difficult for you to achieve your other priorities. It~~ dampens the market signals of increased wages and improved working conditions, so that fewer U.S. workers will be induced to acquire new skills, and fewer employers will be induced to provide more training and education.

Current H-1B Program

The existing H-1B program allows employers to import up to 65,000 temporary foreign workers for up to six years. The foreign worker must have a 4-year degree or the equivalent in ~~terms of~~ combined education and work experience. The employer must agree to pay the prevailing wage, give notice to its workers of its use of foreign workers, and attest that there is no strike or lockout affecting the occupation.

As highlighted by a recent DOL Inspector General report, the existing program fails to provide adequate protections for both U.S. ~~workers~~ and nonimmigrant workers. Weaknesses in the current program include: (1) no labor market test for U.S. workers; (2) no prohibition against laying off U.S. workers; (3) no direct tie to skill shortages (some employers bring in physical therapists, auditors, accountants, and lawyers); (4) employers facing skill shortages compete on a first-come, first-served basis with other employers that do not; (5) nonimmigrant foreign workers are tied to one employer and vulnerable to exploitation; and (6) inadequate enforcement resources.

?

Targeted ~~The Administration's proposed~~ reforms, if accompanied by adequate enforcement resources, could ~~would~~ address ~~some of~~ these problems. In particular, the proposed requirement to recruit U.S. workers would reduce pressure on the visa cap by screening out employers who are not faced with skill shortages and have no interest in recruiting U.S. workers.

?

The IT Skill Shortage

Employment in IT occupations -- a major source of high wage, high benefit jobs in America -- has been growing rapidly and is likely to continue to do so. Employment in higher skill computer-related jobs has been growing by 10% a year and is expected to continue growing at a comparable rate through 2006.

Press reports indicate that there are 350,000 IT jobs that cannot be filled. These reports, however, are not accurate. The 350,000 jobs are job openings at a point in time, as opposed to jobs that cannot be filled. **Job openings do not equate to skill shortages.** Most industries and firms have job openings at any point in time, to compensate for worker turnover and to achieve employment growth. The IT industry, and any other industry with rapid employment growth and high worker turnover, will have large numbers of job openings in the absence of any skill shortages.

This It appears to say that the best evidence is that there is not a nationwide problem, but there may be a very real problem in some parts of the country. If you concede that there could be shortages in some part(s) of the country, then this memo must meet the burden of showing how training programs etc will satisfy that shortage in the short term in those areas

Growing wages is the most reliable indicator of skill shortages, but the wage record for the IT industry is mixed. BLS wage trends for broad computer-related occupational categories show average wage growth between 1988 and 1997 for all categories, but with above-average growth in wages for in 1996 and 1997 in the lower-skill categories. At the same time, a variety of industry wage surveys show larger wage increases in 1996 and 1997 in more specialized occupations at the high skill end. These wage data do not suggest acute skill shortages nationwide, but may be consistent with skill shortages occurring in specialized occupational areas and selected local areas.

In choosing the appropriate policy response to any IT skill shortages, ~~you need to be concerned about~~ we should be careful not to creating ~~the wrong~~ incentives that would undercut your ability to achieve other priorities. Any policy response must walk a delicate line between assuring access to IT jobs for American workers as they move up the career ladder, and ensuring that the industry has access to critical skills that are needed to sustain growth and preserve America's leadership in this industry.

Possible Solutions

All of the options presented below would require expanded enforcement authority and enforcement resources to ensure that added protections for U.S. workers could be effectively implemented.

Option 1: **Maintain cap at current level with no other change.**

Pros
- Allows labor market to produce the incentives needed for achieving other priorities.
- Establishes precedent of not increasing immigration to deal with reports of skill shortages.
- Does not increase number of workers tied to one employer and potential exploitation.
- Strongly supported by unions and other worker representatives.

Cons
- No new response to IT or other skills shortages.
- Strongly opposed by industry and key members of Congress.

Option 2: **Option 1 plus Administration reforms** -- Pros and cons same as option 1 except:

Pros
- Provides greater protections for U.S. workers by requiring recruitment and prohibiting displacement.
- Indirectly addresses needs of IT employers facing skill shortages by screening out employers not faced with such shortages.

Cons
- Response to IT shortages indirect as opposed to direct.

If there is a skill shortage in the IT industry anywhere this year + INS projects that the cap will be reached in how Options 1, 2, or 3 are realistic

Option 3: **Option 2, plus provide preference for industries facing labor shortages** -- Pros and cons same as option 1 and 2 except:

Pro

- Direct response to industries facing IT skills shortages may gain support of selected industries.

Con

- May be difficult to administer.
- May not be consistent with GATT obligations. who knows the answer to this?
-

Option 4: **Raise the cap to between 80,000 and 100,000 with no other changes.**

Pros

- Very visible response to skill shortages in all industries.
- Strongly supported by industry and key members of Congress.

Cons

- Creates the wrong incentives for achieving other administration priorities.
- Establishes precedent of increasing immigration to deal with reports of skill shortages.
- Increases number of workers tied to one employer and potential exploitation.
- May not deal effectively with IT or other skill shortages because of first-come, first-served among employers.
- Opposed by unions and other worker representatives.

Option 5: **Option 4 plus enact Administration reforms and impose additional requirements on the added visas above 65,000 -- priority to industries experiencing shortages and higher skill requirements for foreign workers.**

Pros

- Very visible response to skill shortage in all industries.
- Ties increase in cap more directly to skill shortages.
- Administration reforms provide greater protections for U.S. workers and screen out employers not faced with skill shortages.
- Restrictions on increased cap may be supported some parts of IT industry.

Cons

- Creates the wrong incentives for achieving other administration priorities. why?
- Establishes precedent of increasing immigration to deal with reports of skill shortages. not reports, but actual skill shortages
- Increases number of workers tied to one employer and potential exploitation.
- Any increase likely to be opposed by unions and other worker representatives.
- Employers will oppose the combination of Administration reforms and added restrictions on the increase in the cap. that seems an overstatement.

not if go from 6yrs. to 3yrs. as part of the reform.

- INS projects that cap will be reached in April.
- What about interim solution to transition toward labor pool that is being trained now, but not yet ready to address any immediate shortage. For example, increase could be for two year period and then sunset unless Congress renews because of continuing demonstrated shortage.
  ... 65,000 would be ~~for~~ limited to 2 or 3 years +

NATIONAL SECURITY COUNCIL

FAX COVER SHEET

Office of Democracy, Human Rights and Humanitarian Affairs

NATIONAL SECURITY COUNCIL	From: SCOTT BUSBY
	To: JULIE FERNANDES
	Agency:
	Fax Number: 65581
17th & Penn, N.W. Washington, D.C. 20504	Date/Time:
	No. of pages to follow: ~~2~~ 3
Did you get a complete, clear transmission? If not, please call:	Message: LET'S DISCUSS.
(202) 456-9141	

CONGRESSWOMAN ZOE LOFGREN

FAX TRANSMITTAL

Confidential and Privileged

To: Scott Busby

Office:

Fax # 456-9140

From:

Zoc Lofgren ( )
Lesley Bennctt ( )
David Browne ( )
Jason Mahler ( )
Tom Oscherwitz ( )
Sue Ramanathan (✓)
Lily Toton ( )

Comments:

Pages (including cover): 3

If you have problems with this transmittal, please call 202-225-3072

Business

Published Tuesday, January 13, 1998, in the San Jose Mercury News

Clinton opposes higher visa cap

High-tech needs: Focus on 'home-grown skills,' commerce chief says.

BY MIRANDA EWELL
Mercury News Staff Writer

The Clinton administration will not support an increase in the number of skilled immigrants permitted to work for the high-tech industry to help ease a worker shortage that business leaders say is reaching crisis proportions.

Secretary of Commerce William Daley called an increase in the current cap on H-1B visas ``politically not feasible" at a national convocation on the information-technology workforce shortage held Monday in Oakland.

``We must focus on home-grown skills," Daley told the gathering of 300 industry leaders, educators and government officials, suggesting the solution will come in new partnerships between industry and education.

``In the new economy, businesses have to take on new responsibilities," Daley said. ``Talk to the schools as you would talk to your suppliers. Schools supply your most important raw material."

The role of government will be chiefly to ``shine a spotlight on the opportunities that are there," Daley said.

The conference, which was organized by the Information Technology Association of America, the U.S. Departments of Commerce and Education, and the University of California-Berkeley, kicked off what business hopes will become a national dialogue on the need for more computer professionals. A bevy of government officials, including Education Secretary Richard Riley and Deputy Secretary of Labor Kathryn Higgins, joined Daley to voice concern about the problem but proposed no sweeping new initiatives.

The nation has 346,000 vacancies for information-technology workers, according to a recent study conducted by ITAA with Virginia Tech University. Daley said the Commerce Department released a new estimate Monday that the U.S. economy will generate more than 100,000 information-technology jobs each year for the next decade, at the same time that U.S. universities are expected to turn out 24,000 information-technology graduates yearly.

Daley said in an interview with the Mercury News that industry must concentrate on developing the human capital in the United States, perhaps by turning to segments of the workforce that traditionally have been overlooked by business, such as women, minorities and the disabled.

``Industry can't wait for government to come up with some solution," Daley said. ``Politically that's not going to happen, in my opinion."

Silicon Valley business leaders, however, have said that increasing the cap on visas for skilled high-tech immigrants has become one of their top legislative priorities this year. Kate McGee, vice president of corporate affairs for Oracle, said industry would continue to lobby for such changes and called the commerce secretary's position ``unfortunate.''

Gale Fitzgerald, chief executive of CTG, an international information technology services firm, warned the gathering that the tech-worker shortage could cost the United States its leadership position in the technology field. Turnover rates in the industry range as high as 70 percent and salary increases are running 14 percent yearly as companies across the business spectrum compete for the small pool of available talent, Fitzgerald said.

Graham Spanier, president of Pennsylvania State University and chairman of the Presidential Advisory Board on Information Technology, urged colleges and universities to step up their participation in public policy debates on information-technology issues.

``The boundaries between campus, workplace and home are changing, even eroding,'' Spanier said. ``We can no longer afford to sit on the sidelines.''

Higgins, deputy secretary of labor, announced two initiatives -- an $8 million electronic labor exchange that would coordinate an existing online job bank with an online talent bank, and a $3 million fund to support new projects to train unemployed workers in new skills for the information-technology industry. The Department of Labor and the Department of Education also are providing up to $6 million in grants for business that expand their involvement in school-to-work programs.

Even without any proposals for broad new initiatives, however, the convocation was a useful first step for articulating a key industry issue, said Paul Cosgrove, chief executive of the Claremont Technology Group, Inc. and a member of the ITAA executive board.

The convocation continues today with a luncheon address by Dr. Glenn Seaborg and case studies of partnerships between industry and schools.

Julie A. Fernandes
01/20/98 07:33:50 PM

Record Type: Record

To: Elena Kagan/OPD/EOP

cc: Laura Emmett/WHO/EOP, Leanne A. Shimabukuro/OPD/EOP
Subject: CNN and Immigration

Elena,

Last week in the Silicon Valley, in response to a question regarding Sen. Abraham's proposed legislation that would raise the number of H1B visas (temporary visas for "specialty workers" -- generally higher skilled), Commerce Secretary Daley made a comment that the Administration would oppose raising the annual number of these visas. Historically, we have not used the full number of H1B visas, but the cap (now at 65,000) was reached for the first time in FY 1997.

CNN has called John Frazier at Labor to ask whether someone from there would appear (unclear on what program) tomorrow to comment on this. Frazier is going to inform them that Labor has not seen the legislation, and cannot comment. We also put in a call to INS public affairs to alert them to this.

Julie

PARTICIPANTS AT INTER-AGENCY MEETING RE: H1B VISAS
Wednesday, January 28, 1998
4pm
Room 180

INS

Paul Virtue	514-8223 (Ruby Davis)
Barbara Strack	514-8860
Robert Bach	514-3242

Department of Labor

Seth Harris	219-6181 (Pamela)
Ray Uhalde	219-6050 — Jeanie
John Fraser	219-8305

Department of Commerce

Kent Hughes	482-6315
Andrew Pincus	482-4772 (Debbie)

Department of State

Steve Fischel	663-1184

(+) NEC
Tom Kalil
Ann Lewis

Counsel
Rob Weiner
Maria Echaveste
Scott Busby
Steve Warnath

Higher Quota Urged for Immigrant Technology Workers

By ROBERT PEAR

WASHINGTON, Feb. 22 — Under pressure from Congress and the computer industry, the White House is seriously considering proposals to increase the immigration quota for computer scientists and other information technology workers, so that foreigners can fill thousands of job openings in this country.

The issue is extremely divisive. President Clinton and Vice President Al Gore want to placate friends in Silicon Valley, who say there is a critical shortage of technology workers, but they risk offending organized labor.

Under current law, employers can bring in up to 65,000 skilled foreign workers each year. The workers receive visas, known as H-1B visas, that last up to six years.

In 1997, for the first time, the Government issued the maximum number of such visas, and it expects to reach the limit again in May or June, several months before the end of the current fiscal year.

High-tech companies, which depend on foreign workers for essential services, have been lobbying the Administration to support an increase in the annual limits. They say there is an urgent need for Congress to act this year, and some lawmakers are eager to do so.

The initial, public response from the Administration was negative. In January, Commerce Secretary William M. Daley said, "This Administration does not support an increase in the caps on visas."

The computer industry sees a shortage of workers.

But confidential White House documents show that the Administration is seriously considering proposals that would increase the quota by 50 percent or more. The Administration contends that any increase should be linked to education and training and new protections for American workers.

One industry group, the Information Technology Association of America, sees "a severe shortage of competent and skilled information technology workers." It says there are 346,000 vacancies, representing 10 percent of all the jobs for computer programmers and engineers and systems analysts.

Harris N. Miller, president of the association, said, "The shortage threatens not only the information technology industry, but the growth of the entire U.S. economy, our global competitiveness and the wage stability that is the bedrock of this country's low inflation."

Senator Spencer Abraham, the Michigan Republican who heads the Judiciary Subcommittee on Immigration, shares this concern.

"If American companies cannot find home-grown talent and if they cannot bring talent to this country," Mr. Abraham said, "some of them will move their operations overseas, taking American jobs with them. That is why I am going to use my position to propose that we increase the number of more highly skilled temporary workers we allow into the United States."

Speaker Newt Gingrich said he too supported an increase in the quota for "people of high talent."

The Commerce Department predicts that the United States will need more than 1.3 million new information technology workers — an average of 138,000 a year — in the coming decade.

The openings come in the context of a tight labor market. Over all, the national unemployment rate last year, averaging 4.9 percent, was the lowest since 1973.

The options for increasing the immigration quota are described in a memorandum requested by Elena Kagan, deputy director of the Domestic Policy Council at the White House. The memorandum, prepared and approved by senior officials at the Departments of Commerce, Labor and State and the Immigration and Naturalization Service, begins by saying, "This is a very controversial issue."

Seth Harris, the Acting Assistant Secretary of Labor for Policy, said Ms. Kagan had "asked the Labor and Commerce Departments to draft a memorandum setting forth options with respect to the proposal to increase the cap on H-1B visas."

White House documents show that the Commerce Department, the State Department and the immigration service favor an option that would set the quota for skilled foreign workers at 80,000 to 100,000 a year. Information technology and other industries with shortages of skilled workers would have priority in getting the extra visas, above the current 65,000.

At present, employers seeking H-1B visas do not have to show a shortage of American workers, nor do they have to show that they tried to recruit Americans for the jobs.

The Labor Department would prefer to keep the cap at its current level, but might give priority within the quota to industries that have shortages of skilled workers, the documents say. Senator Edward M. Kennedy of Massachusetts, the ranking Democrat on the immigration subcommittee, favors this approach.

Technology companies say that, while they support more education and training for Americans, they need skilled labor immediately and therefore want to bring in additional foreign workers.

Administration officials said they would prod Congress to adopt new protections for American workers as lawmakers consider raising the quota for foreign workers. The President's proposals would require employers to recruit Americans before importing foreign labor, would ban the use of foreign workers to replace laid-off Americans and would reduce the maximum stay for H-1B workers to three years, from six.

The memorandum to Ms. Kagan notes that "critics of raising the H-1B cap, such as the A.F.L.-C.I.O., the Institute for Electrical and Electronic Engineers and the American Engineering Association, say industry drastically overstates any problem."

Hal Ponder, a lawyer with the A.F.L.-C.I.O.'s department for professional employees, said organized labor opposed increasing the quota until there was more careful study of the problem.

"We question whether there is a shortage of information technology workers," Mr. Ponder said in an interview. "If there is a shortage, there are skilled workers in the United States who could meet that need."

Norman S. Matloff, a professor of computer science at the University of California at Davis, said that many technology companies were seeking cheap labor. As a result, he said, they prefer to hire recent graduates and foreign workers and often discriminate against American computer programmers over the age of 40, who are perceived as requiring higher salaries.

Unions see shrinking job opportunities for Americans.

"Foreign nationals are willing to take lower salaries in exchange for the prospect of becoming permanent residents of the United States," Mr. Matloff said. "Even though they often earn less than U.S. citizens with comparable jobs, they still receive more than they would be paid back home in India or Russia."

The memorandum to the White House from the Departments of Labor, Commerce and State says: "The H-1B program seldom operates as a temporary worker program with workers coming to this country for a short duration and then returning to their homes. Instead, it operates often as a probationary employment program. Employers bring workers to the United States and, if they perform well, sponsor them for permanent admission to this country. This linkage permits employers to hire foreign workers without first recruiting U.S. workers."

Under this arrangement, the memorandum says, "U.S. workers are never provided a genuine opportunity to compete for these jobs."

Stephen H. Leven, director of human resources at Texas Instruments, said that most of the people hired by his company on H-1B visas were foreign citizens who graduated from American universities with degrees in electrical engineering.

"Employers expect to hit the H-1B ceiling as early as May this year," Mr. Leven said. "Once the cap is reached, companies will be unable to hire additional foreign workers until the new fiscal year begins in October. That will be devastating to U.S. companies seeking to bring new products to market."

In their memorandum to the White House, Administration officials said the industry's conclusion about a dire shortage of skilled technology workers was "not entirely accurate." While there seem to be shortages of technology workers in selected occupations and some local areas, the memorandum says, "wage data do not suggest acute skill shortages nationwide."

By contrast, the Information Technology Association of America says, "Our industry is facing a national labor shortage of historic proportions."

Washing
Tougher

By The New York Tim

WASHINGTON, Fel
Crews are installing st
art parking meters in
Washington, replacing
damaged meters in an
recover lost revenue.

Only 7,000 of the city
16,000 parking mete
Many have been v
causing a decline in par
nues from $1 million a
1995 to $260,000 last Oct

The city's Financia
Board, which oversees
nicipal operations, c
Lockheed Martin IMS,
known as one of the na
jor aerospace compan
stall new meters. The
was approved by the Ci
in early February, and
gan replacing the m
month.

City officials predict
new digital meters wil
$15 million dollars of
year. The money is im
the financially troubled
the installation also rep
small, but highly visible
the image of the capita

"Installation of new
meters is proof that we
ing in the right direct
Dr. Andrew Brummer,
man of the Financia
Board. "These new m
improve performance,
revenue and make go

Report Finds Bias in Lending Hinders Home Buying in Cities

By MICHAEL JANOFSKY

WASHINGTON, Feb. 22 — While the number of Americans who own their homes has reached a record level, a new report by the United States Conference of Mayors contends that discriminatory lending practices in urban areas have kept many city dwellers from participating in the boom.

Last year, the overall national rate of home ownership reached a record high of 65.7 percent. But the report,

findings. "This report proves that home ownership in America is still too often separate and unequal."

Home ownership is viewed by many sociologists and politicians as vital to neighborhood stability, a key to promoting safer streets, better schools and economic development.

That pattern has worked successfully in suburban areas for decades as thousands of bedroom communities have sprung up around urban centers. But in many cases, the out-

OIRA

INGRID M. SCHROEDER
02/24/98 01:33:39 PM

Record Type: Record

To: Julie A. Fernandes/OPD/EOP
cc:
Subject: Comments on DOL H-1B testimony

--------------------- Forwarded by Ingrid M. Schroeder/OMB/EOP on 02/24/98 01:33 PM ---------------------------

Daniel J. Chenok
02/24/98 10:19:46 AM

Record Type: Record

To: Ingrid M. Schroeder/OMB/EOP@EOP
cc: Debra J. Bond/OMB/EOP@EOP
Subject: Comments on DOL H-1B testimony

We have a variety of recommended comments related to the lack of certainty or presentation of the problem in terms not consistent with recent Administration actions. Page references are from the text-of-e-mail version.

p. 1 First paragraph, three lines from the bottom. Recommend deleting "serious" before "flawed" and "urgently" before "requires". The Administration has not been pushing the legislative proposal consistently since 1995 and if the problem were "serious" requiring "urgent" attention, why have we waited until now to reemphasize the need for change?

p. 2 Two lines from the bottom. Add "long-term" before "public policy response". As DOL ~~later~~ points out, H-1B can be appropriate for short-term needs.

p. 3 First full paragraph, last sentence. Revise "would" to "may" before "undercut". Increased immigration does not necessarily undercut incentives created by skill shortages if done in the right way, as DOL later suggests.

p. 4 First full paragraph. First line, change "will to "may" before "interfere"; second line, change "makes" to "may make" before "achieving"; third line, change "dampens" to "may dampen" before "the market". All of these changes are intended to demonstrate that use of foreign temporary workers is not necessarily damaging if done correctly.

~~p. 4~~ Second full paragraph, first line. Add "long-term" before "public policy".

p. 5 Second bullet after "Convocation ... ", second line. Delete "by the Labor Department" after "America's Talent Bank". DOL has argued that the Job Bank and the Talent Bank are not conducted or sponsored by DOL, thus making them not subject to the Paperwork Reduction Act.

Unless DOL is reconsidering this position the phrase should be deleted (and if they are reconsidering then we will need to clear these initiatives under the PRA).

p. 6 Second paragraph under "H-1B Nonimmigrant Program", second line. Revise "Exacerbating this problem" to "Moreover". The changes that DOL later recommends do not affect enforcement authority and thus it is inconsistent to say that the lack of enforcement authority is an "exacerbating" condition.

p. 7 First full paragraph, last sentence. There is a syntax problem that could be fixed by deleting the word "who" after "foreign workers".

p. 8 Four lines from the top. Recommend revising the entire line to read "lower-skill occupations". DOL paints the entire computer and health care industries as improperly using H-1B. There are certainly legitimate users of the program in these industries, and thus we do not recommend casting the entire sector in a negative light.

p. 8 Last paragraph, third line. Delete "computer-related and health care" before "occupations" fir the same reason as the last comment.

p. 10 First paragraph after "Conclusion", second sentence. In the fourth line, delete "fundamentally" before "flawed" and add "current" before "H-1B". DOL recommends amending the program to address concerns, and the program would stay in effect; a "fundamentally" flawed program would merit a more sweeping recommendation.

INGRID M. SCHROEDER
02/24/98 02:05:57 PM

Record Type: Record

To: Julie A. Fernandes/OPD/EOP
cc:
Subject: Re: H1-B rewrite from Labor

---------------------- Forwarded by Ingrid M. Schroeder/OMB/EOP on 02/24/98 02:05 PM ---------------------------

Daniel J. Chenok
02/24/98 02:04:58 PM

Record Type: Record

To: Debra J. Bond/OMB/EOP@EOP
cc: Ingrid M. Schroeder/OMB/EOP@EOP, Larry R. Matlack/OMB/EOP@EOP, Maureen H. Walsh/OMB/EOP@EOP
Subject: Re: H1-B rewrite from Labor

I concur with all of the Labor Branch's insightful comments. The two things still not addressed are the two places where I recommended inserting "long -term" before "public policy" and the deletion of "by the Department of Labor" after theTalent Bank reference.

INGRID M. SCHROEDER
02/24/98 03:58:41 PM

Record Type: Record

To: Julie A. Fernandes/OPD/EOP
cc:
bcc:
Subject: Re: H-1B LRM

How about something more like this:

As the Administration continues to develop its policy with regard to H-1B visas it will take into account the special concerns and requirements of our nation's non-profit research institutions and high-tech communities.

Clifford J. Gabriel

Clifford J. Gabriel
02/24/98 03:54:28 PM

Record Type: Record

To: Ingrid M. Schroeder/OMB/EOP@EOP
cc: Julie A. Fernandes/OPD/EOP@EOP
Subject: H-1B LRM

Ingrid: I spoke to Julie about the proposed H-1B reforms and gave her the following language that she said she would work on to create a "place holder" for special immigration needs associated with universities and other nonprofit research institutions. We've been down this road before where what may be good general immigration policy doesn't make for good science and technology policy. Cliff

Possible insert on page 7 at the end of the second paragraph:

In reforming the H-1B program, we must be careful not to hinder the ability of our nation's non-profit research institutions (universities, federal laboratories, FFRDCs, and other non profit research institutes) from entering into international collaborations, which are crucial to keeping this country on the cutting edge of science and technology.

Basically, we need a place holder to indicate that what may be appropriate H-1B policy for the

IT may not (is not) good policy for our nonprofit research sector--especially universities. There is precedent for this in prevailing wage determinations (going back to pre-Hathaway for this sector).