Improving and Expanding Training Opportunities for F-1 Nonimmigrant Students with STEM Degrees and Cap-Gap Relief for All Eligible F-1 Students

NOTICE OF PROPOSED RULEMAKING
(8 CFR Part 214 and 274a)

RIN: 1653-AA72

INITIAL REGULATORY IMPACT ANALYSIS

October, 2015

TABLE OF CONTENTS

LIST OF TABLES

ABBREVIATIONS

CIP	Classification of Instructional Programs
CFR	Code of Federal Regulations
DHS	Department of Homeland Security
DSO	Designated School Official
EAD	Employment Authorization Document
FR	Federal Register
ICE	U.S. Immigration and Customs Enforcement
IFR	Interim Final Rule
IRFA	Initial Regulatory Flexibility Analysis
NAFSA	Association of International Educators
NPRM	Notice of Proposed Rulemaking
OMB	Office of Management and Budget
OPT	Optional Practical Training
RFA	Regulatory Flexibility Act
SEVIS	Student and Exchange Visitor Information System
SEVP	Student and Exchange Visitor Program
STEM	Science, Technology, Engineering, or Mathematics
USCIS	U.S. Citizenship and Immigration Services

A. Executive Orders 13563 and 12866

Executive Orders 13563 and 12866 direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health, and safety effects, as well as distributive impacts and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility. The Department of Homeland Security (DHS or Department) has determined that this rule is a "significant regulatory action," as well as an economically significant regulatory action under section 3(f) of Executive Order 12866. Accordingly, the Office of Management and Budget (OMB) has reviewed this regulation.

1. Need for Regulatory Action

The changes proposed in this notice of proposed rulemaking would amend current regulations governing F-1 nonimmigrant students to allow for an extension of the Optional Practical Training (OPT) period for certain F-1 students who have earned science, technology, engineering, or mathematics (STEM) degrees from U.S. institutions of higher education. The proposed rule would also improve and increase oversight over STEM OPT extensions by, among other things, requiring the implementation of formal mentoring and training plans by employers, adding wage and other protections for STEM OPT students and U.S. workers, and allowing extensions only to students with degrees from accredited schools.

The proposed changes to the STEM OPT extension regulations take into consideration the public comments received on an earlier rulemaking. Based in part on those comments, this rule proposes to enhance the academic benefit of the STEM extension, create a formal process

for updating the list of STEM degree programs that are eligible for the STEM OPT extension, and incorporate new measures to safeguard the interests of U.S. workers in related fields.

The proposed rule would also maintain two provisions introduced in 2008. First, the proposed rule would permit STEM OPT extensions only to students employed by employers enrolled in U.S. Citizenship and Immigration Services' (USCIS') E-Verify employment eligibility verification program. Second, the proposal includes what is known as "Cap-Gap" relief for qualifying F-1 students with timely filed H-1B petitions and requests for change of status. This Cap-Gap relief allows such students to automatically extend the duration of F-1 status and any current employment authorization until October 1 of the fiscal year for which such H-1B classification is being requested.

In addition to improving the integrity and value of the STEM OPT program, this proposed rule also responds to a court decision that ordered the vacatur of a 2008 DHS regulation (2008 IFR) on procedural grounds. The proposed rule includes changes to the policies announced in the 2008 IFR to further enhance the academic benefit provided by STEM OPT extensions, including by better ensuring that students gain valuable practical STEM experience that supplements knowledge gained through their academic studies. By earning a functional understanding of how to apply that knowledge in a work setting, students will be better positioned to begin careers in their fields of study. These on-the-job educational experiences would be obtained with employers who commit to developing students' knowledge and skills through practical application. The proposed changes would also help ensure that the nation's colleges and universities remain globally competitive in attracting international STEM students to study and lawfully remain in the United States.

2. Summary

OPT is a form of temporary employment available to F-1 students who are earning or have earned degrees from U.S. institutions of higher education. Such employment must directly relate to and complement a student's study in the United States. A student can engage in OPT during their academic program, known as "pre-completion OPT," or after completing the academic program, known as "post-completion OPT." A student can apply for 12 months of OPT at each education level (e.g., one 12-month OPT period at the bachelor's level and another 12-month period at the master's level). While school is in session, the student may work up to 20 hours per week pursuant to OPT.

In 2008 DHS implemented the 2008 IFR, which extended OPT by 17 months, for F-1 students who are in a period of post-completion OPT and have earned science, technology, engineering or mathematics degrees listed in the STEM Designated Degree Program list (STEM OPT extension program).[1] On August 12, 2015, the U.S. District Court for the District of Columbia ordered the vacatur of the 2008 IFR for procedural deficiencies in its promulgation, and remanded the issue to DHS. DHS is proposing this rule to reinstate the STEM OPT extension, with changes intended to enhance the academic benefit afforded by the extension, increase program oversight, and better protect U.S. workers.[2]

This proposed rule, if made final, would extend to 24-months the previous 17-month OPT extension program for STEM graduates; allow eligible students two STEM OPT extensions in their lifetime; expand eligibility for the extension to students whose qualifying STEM degree

[1] 73 FR 18944 (Apr. 8, 2008).

[2] These changes are consistent with the direction provided in the Secretary of Homeland Security's November 20, 2014 memorandum entitled, "Policies Supporting U.S. High Skilled Businesses and Workers." DHS recognizes the nation's need to evaluate, strengthen, and improve practical training as part of an overall strategy to enhance our nation's economic, scientific, and technological competitiveness. Highly skilled persons educated in the United States contribute significantly to the U.S. economy, including through advances in entrepreneurial and research and development endeavors, which correlate highly with overall economic growth and job creation.

is not his or her most recent degree; allow STEM OPT extensions only to students with degrees from accredited institutions; implement formal mentoring and training requirements for students on 24-month extensions; require the disclosure of additional information, such as the level of compensation to be paid to the student, to ICE's Student and Exchange Visitor Program (SEVP); require that students on 24-month extensions receive practical training opportunities that provide commensurate terms and conditions of employment to that provided similarly situated U.S. workers; require employers to attest that the hiring of a STEM OPT student will not displace U.S. workers; and, implement a formal process to update the STEM Designated Degree Program list. The NPRM proposes to maintain requirements from the 2008 IFR, such as the requirement that Designated School Officials (DSOs) report certain student information to SEVP and the requirement that employers of STEM OPT students use E-Verify for all new hires. Additionally the NPRM proposes to maintain the Cap-Gap relief described in the 2008 IFR. The following table summarizes changes between the 2008 IFR and this proposed rule.

Table 1: Summary of Proposed Changes by Provision

Regulatory Change	Previously in STEM OPT 2008 IFR	Newly Proposed in the NPRM
Changing the maximum extension period for STEM OPT from 17 months to 24 months	Included STEM OPT extension of 17 months	Propose to Maintain with Modification: Expand extension to 24 months
Allowing a qualifying second STEM degree (which is at a higher academic level than the first degree) or a qualifying prior STEM degree to be the basis for a second STEM OPT extension of 24 months	N/A, Students can obtain STEM OPT once in a lifetime	New: Students can obtain STEM OPT twice in a lifetime
Providing process to make changes to the list of qualifying STEM fields based on U.S. Department of Education Classification of Instructional Program (CIP) codes	Included: CIP List	Propose to Maintain with Modification: New process for updating CIP list
Requiring employers to implement formal training programs and execute customized Mentoring and Training Plans to augment STEM OPT students' academic learning through practical experience	N/A	New
Requiring employers to provide STEM OPT students with compensation commensurate to similarly situated U.S. workers, to report compensation as part of the Mentoring and Training Plan, and to attest that the student will not displace U.S. workers	N/A	New
Requiring biannual evaluations and validation check-ins with employers and STEM OPT students	Included: biannual validation check-ins and updates to student information	Propose to Maintain with Modification: Also requires biannual student evaluations during OPT extension
Requiring employers to report to DSOs within 48 hours after a STEM OPT student has been terminated from, or otherwise leaves, his or her employment with that employer prior to end of the authorized period of STEM OPT	Included	Propose to Maintain
Requiring OPT students to report changes in the student's name or address and changes in the employer's name or address to the DSO	Included	Propose to Maintain
Requiring STEM OPT students to periodically (at least biannually) verify the accuracy of this reporting information	Included	Propose to Maintain
Requiring employers seeking to employ a STEM OPT student to be enrolled in USCIS' E-Verify employment eligibility verification program	Included	Propose to Maintain
Extending the authorized period of stay for all F-1 students with properly filed H-1B petitions and requests for change of status (filed under the cap for the next fiscal year) with USCIS ("Cap-Gap" relief)	Included	Propose to Maintain
Extending the maximum period during which a STEM OPT student may be unemployed (students are currently capped at 90 days for an initial period of post-completion OPT)	Included: Provided students granted a 17-month STEM OPT extension with an added 30 days in which they may be unemployed, for an aggregate period of 120 days	Propose to Maintain with Modification: Provide students granted a 24-month STEM OPT extension with an added 60 days in which they may be unemployed, for an aggregate period of 150 days
Allowing students to apply for OPT within 60 days of concluding their academic program	Included	Propose to Maintain
Allowing STEM OPT extension eligibility only for students with degrees from schools that are accredited by an accrediting agency recognized by the Department of Education	N/A	New
Specifying DHS authority to conduct employer on-site reviews at worksites to verify whether employers are meeting program requirements	N/A	New

DHS estimates the total 10-year discounted cost of the STEM OPT portion of the rule to be approximately $455.7 million at a seven percent discount rate and $570.4 million at a three percent discount rate. DHS estimates the total 10-year discounted cost of the E-Verify portion of the rule to be approximately $47.6 million at a seven percent discount rate and $61.0 million at a three percent discount rate.

Table 2: Summary of Total Costs (Millions) for OPT STEM and E-Verify

Year	STEM OPT	E-Verify	Total
1	$53.3	$3.0	**$56.3**
2	$40.7	$3.6	**$44.3**
3	$46.8	$4.3	**$51.1**
4	$53.9	$5.1	**$58.9**
5	$61.9	$6.0	**$68.0**
6	$68.7	$7.2	**$75.9**
7	$76.3	$8.6	**$84.9**
8	$84.7	$10.2	**$94.9**
9	$94.0	$12.1	**$106.1**
10	$104.3	$14.4	**$118.8**
Total	**$684.8**	**$74.5**	**$759.3**
Total (7%)	$455.7	$47.6	**$503.3**
Total (3%)	$570.4	$61.0	**$631.5**
Annual (7%)	$64.9	$6.8	**$71.7**
Annual (3%)	$66.9	$7.2	**$74.0**

*Estimates may not total due to rounding.

With respect to benefits, making the STEM OPT extension available to additional students and extending the current 17-month extension will enhance students' ability to achieve the objectives of their courses of study by gaining valuable knowledge and skills through on-the-job training that is often unavailable in their home countries. The proposed changes will also benefit the U.S. higher education system, U.S. employers, and the United States. The proposed rule will benefit the U.S. educational system by helping ensure that the nation's colleges and universities remain globally competitive in attracting international students in STEM fields. U.S.

employers will benefit from the increased ability to rely on the skills acquired by OPT students while studying in the United States.

Furthermore, improving the STEM OPT extension by implementing requirements for training and mentoring, tracking objectives, reporting on program compliance, and accreditation of participating schools would further prevent the potential for abuse of the limited training opportunities provided by this program.[3] These and other proposals, including changes intended to protect U.S. workers, would also improve program oversight and strengthen the requirements for program participation.

The following table presents a summary of the benefits and costs of the proposed rule. Students will incur costs for completing application forms and paying application fees; reporting to DSOs; preparing, with their employers, the Mentoring and Training Plan required by this rule; and periodically submitting updates to employers and DSOs. DSOs will incur costs for reviewing information and forms submitted by students, inputting required information into the Student and Exchange Visitor Information System (SEVIS), and complying with other oversight requirements related to prospective and participating STEM OPT students. Employers of STEM OPT students will incur costs for preparing the Mentoring and Training Plan with students, evaluating whether the students are receiving on-the-job learning experiences as outlined in the Mentoring and Training Plan, enrolling in (if not previously enrolled) and using the E-Verify system to verify employment eligibility for all new hires, and complying with additional requirements related to the E-Verify system.

[3] A recent GAO audit of OPT found among other things that ICE has not consistently collected the information and developed the monitoring mechanisms needed to help ensure foreign students comply with OPT requirements. *See* GAO, Student and Exchange Visitor Program: DHS Needs to Assess Risks and Strengthen Oversight of Foreign Students with Employment Authorization (Mar. 7, 2014), available at http://gao.gov/products/GAO-14-356.

Table 3: Summary of the Costs, Monetized, Non-Monetized, and Net Benefits of Proposed Rule, 2016-2025 (2014 Dollars) (Millions)

	STEM OPT	E-Verify	Total Rulemaking
10-Year Cost Annualized at 7% Discount Rate	$64.9	$6.8	$71.7
10-Year Cost Annualized at 3% Discount Rate	$66.9	$7.2	$74.0
Qualitative Costs	• Cost to students and schools resulting from proposed accreditation requirement; • Cost to employers from the proposed requirement to provide STEM OPT students commensurate compensation to similarly situated U.S. workers; and • Decreased practical training opportunities for students no longer eligible for the program due to proposed improvements to the STEM OPT extension.		
Monetized Benefits	N/A		N/A
Qualitative Benefits	• Increased ability of students to gain valuable knowledge and skills through on-the-job training in their field that is often unavailable in their home countries; • Increased global attractiveness of U.S. colleges and universities; and • Increased program oversight and strengthened requirements for program participation, and new protections for U.S. workers.		
Net Benefits	N/A		N/A

*Estimates may not total due to rounding.

3. Background and Baseline

A student in F-1 status may remain in the United States for the duration of his or her academic program if otherwise meeting the requirements for the maintenance of status.[4] Once an F-1 student has completed his or her academic program and any subsequent period of OPT, the student must generally leave the United States unless he or she: enrolls in another academic program, either at the same school or at another SEVP-certified school; changes to a different nonimmigrant status; or otherwise legally extends his or her period of authorized stay in the United States. Unless an F-1 student meets certain limited exceptions, he or she may not be employed in the United States during the term of his or her academic program.

[4] 8 CFR 214.2(f)(5)(i).

DHS permits an F-1 student who has been enrolled on a full-time basis for at least one full academic year in a college, university, conservatory, or seminary certified by SEVP, and who has otherwise maintained his or her status, to apply for practical training to work for a U.S. employer in a job directly related to his or her major area of study.[5] DHS had previously limited the duration of OPT to a period of up to 12 months at a given educational level. An F-1 student may seek employment through OPT either during his or her academic program (pre-completion OPT) or immediately after graduation (post-completion OPT). The student remains in F-1 nonimmigrant status throughout the OPT period. Thus an F-1 student in post-completion OPT does not have to leave the United States within 60 days after graduation, but instead has authorization to remain for the entire post-completion OPT period.

On April 8, 2008, DHS published the 2008 IFR in the Federal Register. 73 FR 18944. Among other things, the 2008 IFR extended the maximum period of post-completion OPT from 12 to 29 months (through a 17-month "STEM OPT extension") for an F-1 student who obtained a degree in a designated STEM field from a U.S. institution of higher education and who was engaged in practical training with an employer enrolled in the E-Verify employment eligibility verification program.

Based on the requirements of the 2008 IFR, students are currently eligible for a one-time 17-month OPT extension, beyond the initial 12 months of OPT, if they meet all of the following conditions:

- Currently approved for post-completion OPT;[6]
- Completed a bachelor's, master's, or doctoral degree in a STEM field listed on the STEM Designated Degree Program list;[7]

[5] 8 CFR 214.2(f)(10).
[6] 8 CFR 214.2(f)(10)(ii)(C).

- Have a job or job offer from an employer participating in the E-Verify employment eligibility verification program;[8] and
- Have not previously received a 17-month OPT extension.[9]

Under the 2008 IFR, students who wish to extend an initial period of OPT must request that their DSOs recommend the 17-month extension. Students must submit to their DSOs updated personal information, employer information, and a completed Form I-765, Application for Employment Authorization. DSOs recommending the extension must verify the student's eligibility, certify that the student's degree is on the STEM Designated Degree Program list, and ensure that the student is aware of his or her responsibilities for maintaining status while on OPT.[10] The DSO must make the recommendation to extend OPT through SEVIS, a web-enabled database for the collection of information related to F, M, and J nonimmigrants, certified schools, and exchange visitor programs approved by the Department of State.[11] DSOs then issue a new Form I-20, Certificate of Eligibility for Nonimmigrant (F-1) Student Status, with a recommendation for the OPT extension.[12] Once the DSO recommends a student for the extension, the student must submit a Form I-765 and appropriate fees (as indicated in the form instructions) to USCIS. The student mails the completed Form I-765, associated $380 application fee, recent photos, and all required documentation (e.g., copy of STEM degree, photocopy of last Employment Authorization Document (EAD), etc.) to USCIS.[13]

Under the 2008 IFR, students are required to report to their DSOs within 10 days changes related to any of the following: legal name, residential or mailing address, employer name,

[7] 8 CFR 214.2(f)(10)(ii)(C)(2).
[8] 8 CFR 214.2(f)(10)(ii)(C)(3).
[9] 8 CFR 214.2(f)(10)(ii)(C)(1).
[10] 8 CFR 214.2(f)(11)(ii)(A).
[11] 8 CFR 214.2(f)(11)(ii)(B).
[12] 8 CFR 214.2(f)(11)(ii)(C).
[13] 8 CFR 214.2(f)(11)(i)(A).

employer address, or employment status.[14] Students are also required to report to their DSOs every six months during the STEM OPT extension.[15] Under the 2008 IFR, the STEM OPT employer must agree to report to the relevant DSO, or through "any other means or process identified by DHS," the termination or departure of the student within 48 hours of such an occurrence.[16]

On August 12, 2015, the U.S. District Court for the District of Columbia issued an order in the case of Washington Alliance of Tech Workers v. U.S. Dep't of Homeland Security.[17] In that order, the court invalidated the 2008 IFR as procedurally deficient, and remanded the issue to DHS. Although the court concluded that the 2008 IFR rested upon a reasonable interpretation of the Immigration and Nationality Act of 1952, the court also held that DHS violated the Administrative Procedure Act (APA) by promulgating the 2008 IFR without advance notice and opportunity for public comment.[18] The court thus vacated the 2008 IFR, but stayed the effective date of the vacatur until February 12, 2016.

Due to the vacatur of the 2008 IFR, the baseline for this regulatory impact analysis assumes the current availability of the 12-month post-completion OPT period[19] but not the availability of the 17-month STEM OPT extension.

[14] 8 CFR 214.2(f)(12)(ii)(A).
[15] 8 CFR 214.2(f)(12)(ii)(B).
[16] 8 CFR 214.2(f)(10)(ii)(C)(4).
[17] No. 1:14-cv-00529, —— WL —— (D.D.C. Aug. 12, 2015) (Washington Alliance) (slip op.)
[18] The court withheld judgment on the agency's substantive rationale for the 2008 IFR specifically. See Washington Alliance, No. 1:14-cv-00529, at p. 29, n.9. As noted, however, the court found ample support for the Government's longstanding practice of granting F-1 students employment authorization for practical training.
[19] This post-completion OPT period can be up to 12 months, except in certain circumstances involving the student engaging in pre-completion OPT or what is known as "curricular practical training" (CPT).

4. Summary of Affected Parties

There are five categories of students who would be eligible for STEM OPT extensions under the proposed rule:

1. Students who would be eligible for participation in the STEM OPT extension based on a recently obtained STEM degree;
2. Students who would be eligible based upon a STEM degree earned prior to their most recent degree;
3. Students who would be eligible based upon a second qualifying STEM degree earned at a higher education level;
4. Students who would be eligible based on potential changes to the current STEM-Designated Degree Program list; and
5. Students who would be eligible to increase a currently authorized STEM OPT extension period from 17 to 24 months.

The following sections describe the above five categories and the population estimates for each.

Students currently eligible for participation in the STEM OPT extension

Base Population

This proposed rule would change the period of the STEM-OPT extension from a maximum of 17 months to a maximum of 24 months. DHS bases its estimates of the number of students who would be eligible for the 24-month STEM OPT extension in the first year of an effective rule (assumed as 2016) based on the number of students who were previously eligible for 17-month STEM-OPT extensions. DHS approved applications for the 17-month extension since 2010 as follows: 9,418 in calendar year (CY) 2010; 13,603 in CY 2011; 16,066 in CY 2012; 18,954 in CY 2013; and 22,122 in CY 2014.

Because the criteria for the 17-month and 24-month extensions are similar, DHS estimates that most students who were eligible for the 17-month extension would be eligible for the proposed 24-month extension. DHS thus assumes the number of applicants who have been approved for 17-month extensions would adequately serve as a baseline estimate for the forecasted population affected by the proposed rule. The proposed rule, however, would restrict eligibility for STEM OPT extensions by making them available only to those students receiving qualifying degrees from schools accredited by an accrediting agency recognized by the U.S. Department of Education. Approximately 0.56 percent of students receiving 17-month STEM OPT extensions graduated from schools that do not meet this accreditation requirement.[20]

Population Growth

The number of students approved for STEM OPT has increased from 9,418 in CY 2010 to 22,122 in CY 2014, representing a compound annual growth rate of 24 percent.[21] Growth in program participation, however, has been declining in recent years. Between 2010 and 2011, there was a 45 percent increase in the number of STEM OPT extensions granted by DHS. Between 2013 and 2014, the growth rate was down to 16.7 percent. The demand for STEM-skilled workers is expected to continue to increase in the future, as both the number and proportion of STEM jobs are projected to grow.[22] DHS, however, does not believe the 24 percent compound annual growth rate is representative of long-term future growth based on the declining rate of growth since 2010 as the program has matured. DHS thus considers a more appropriate growth rate for use in the analysis.

[20] ICE Student and Exchange Visitor Information System (SEVIS), data from 2010 to 2015.
[21] ICE SEVIS data. DHS uses the most recent five full years of data, where available and appropriate, throughout this analysis.
[22] Bureau of Labor Statistics data show that employment in STEM occupations is expected to expand faster than employment in all occupations from 2012 to 2022 (by 13 versus 11 percent).
Bureau of Labor Statistics, Occupational Outlook Quarterly, Spring 2014, STEM 101: Intro to Tomorrow's Jobs, page 6: http://www.stemedcoalition.org/wp-content/uploads/2010/05/BLS-STEM-Jobs-report-spring-2014.pdf.

Between 2010 and 2014, the compound annual growth rate for F-1 nonimmigrant visa issuance has been approximately 11.5 percent.[23] During the same period, the compound annual growth rate in the number of F-1 students graduating with a bachelor's, master's, or doctorate degree in a STEM field eligible for the 17-month extension has been 11 percent. These figures indicate that the proportion of F-1 nonimmigrant students studying in STEM fields did not increase over this period. However, the proportion of eligible students who chose to participate in the 17-month STEM OPT extension has been increasing over this period from a 28.9 percent participation rate in CY 2010 to a 44.4 percent participation rate in CY 2014.[24] This equates to growth of 3.9 percentage points per year in the participation rate.[25]

It is difficult to forecast the continued growth of student participation in any STEM OPT program as such participation depends on a number of variables outside of the effect of this rulemaking, such as the strength of the global economy, the continued competitiveness of U.S. institutions of higher education, and the growth of jobs in STEM fields in the United States and globally. Participation is also dependent on a number of variables resulting from this proposed rule, such as potential decreased participation by students or employers as a result of increased requirements or potential increased participation because of the longer training period and the ability to participate twice based upon a second qualifying degree at a higher education level. As a result, DHS does not include any impact of induced visa or program participation demand resulting from the proposed rule.

---

[23] Department of State, Nonimmigrant Visa Statistics, Nonimmigrant Worldwide Issuance and Refusal Data by Visa Category, Nonimmigrant Visa Issuances by Visa Class and by Nationality, FY 2010 – FY 2014 for F-1 visas: http://travel.state.gov/content/visas/english/law-and-policy/statistics/non-immigrant-visas.html. http://travel.state.gov/content/dam/visas/Statistics/AnnualReports/FY2014AnnualReport/FY14AnnualReport-TableXVIB.pdf
(595,569 F-1 Visas Issued in FY2014/385,210 F-1 Visas Issued in FY2010)^(1/12)-1 = 11.5%.

[24] ICE SEVIS data.

[25] 3.9% = (44.4% participation in 2010 - 28.9% participation in 2014)/4.

Despite these uncertainties, DHS expects the number of participants in the program to continue to increase at least as fast as growth in F-1 visa issuance, which would maintain the current proportion of F-1 students participating in the program. In addition, for a period of time DHS expects some continued growth in the proportion of eligible students who participate in the program. For this period of time, DHS uses 15 percent as the annual growth rate of the program.[26]

Growth in the participation rate is likely to peak and level off at a certain point. To estimate the maximum long-term rate of participation in the STEM OPT program, DHS uses the overall proportion of students with an eligible STEM degree who participate in the post-completion OPT program.[27] The data from 2010 to 2014 show that participation in the post-completion OPT program has remained fairly steady, remaining between 68 and 72 percent or, on average, 70 percent.[28] DHS uses the steady-state 70 percent rate of participation in post-completion OPT as the assumed steady state for participation in the STEM OPT extension.

For the STEM OPT program, DHS therefore assumes a higher growth rate of 15 percent until the imputed participation rate in STEM-OPT extension reaches 70 percent, and an 11 percent growth rate thereafter. This is reached between years five and six of this analysis.[29] DHS applies the 15 percent growth rate through year 5 and the 11 percent growth rate to years 6 through 10. DHS recognizes that the growth rate has a large impact on the estimated costs of the proposed rule. DHS welcomes comments, suggestions, and data regarding these assumptions.

[26] As noted above, 11.5% is the compound annual growth rate in the number of F-1 visas issued, and 11% is the compound annual growth rate in the number of F-1 nonimmigrant students graduating with a STEM degree. Assuming an annual growth rate of 11% in the eligible population and an increase in the participation rate of 3.9 percentage points per year yields an annual growth rate of (1.11)*(1.039) – 1 = 15.44%, which is rounded to 15 percent.

[27] Only students participating in post-completion OPT are eligible for participation in the STEM OPT extension.

[28] ICE SEVIS data.

[29] Using the 44.4% participation rate in 2014 as the basis.

Using the above assumptions, and removing the 0.56 percent of students from schools that do not meet the accreditation requirement of the proposed rule, DHS estimates approximately 29,100 students are eligible for post-completion OPT beginning in the first year of the new program (assumed as 2016).[30]

Students who would be eligible based upon a STEM degree earned prior to their most recent degree

The proposed rule would also broaden eligibility for the STEM OPT extension to include students whose qualifying STEM degree was earned prior to their most recent degree, so long as both degrees were earned at accredited schools. For example, a student who has completed a bachelor's degree in computer science, did not participate in an extension of OPT based on his or her STEM degree, and went on to obtain a master's degree in Business Administration, would be eligible to extend his or her post-completion OPT for the most recent program based on the prior STEM degree in computer science, so long as the student's STEM practical training opportunity is directly related to the prior degree.

Students eligible for such an extension could have obtained their previously earned STEM degree while in F-1 status, or while in the United States on a different status. Using data from SEVIS, DHS estimates that initially, approximately 155 students annually would be eligible based upon a prior degree obtained while the student was in F-1 status for both degrees. As discussed previously, 70 percent of students graduating with a STEM degree participate in post-completion OPT. In addition, approximately 0.56 percent of students attend schools that do not meet the accreditation requirement of the proposed rule. Taking these figures into account, DHS

[30] CY 2014 22,122 × 1.15^2 = 29,256 × (1-0.0056 unaccredited) = 29,093 rounded to 29,100.

estimates that approximately 108 students with prior degrees while in F-1 status might participate in the program in the first year.[31]

As noted above, students would also be eligible for the STEM OPT extension if they obtained STEM degrees at accredited institutions while in a nonimmigrant status other than F-1 status and later pursued a subsequent non-STEM degree while in F-1 status. Because DHS does not have and is not aware of data that quantifies the prevalence of degrees earned by non-F-1 nonimmigrants, DHS is unable to estimate with accuracy the number of students who may qualify for the extension under these circumstances. DHS uses the following methodology and assumptions to create an estimate of this potential population. DHS welcomes comments and suggestions on how to quantify this population.

Spouses or minor children of nonimmigrants in the following visa categories in certain circumstances may not need to change to F-1 nonimmigrant status if they wish to attend school full-time in the United States:[32]

- Diplomatic and other government officials, and employees (A visa)
- International trade and investors (E visa)
- Representatives to international organizations and their employees (G visa)
- Temporary workers (H visa)
- Representatives of foreign media (I visa)
- Exchange visitors (J visa)
- Intracompany transferee (L visa)

[31] 155 students × 70% participation rate × (1-0.0056 unaccredited) = 108.
[32] http://www.uscis.gov/visit-united-states/change-my-nonimmigrant-status-category/change-my-nonimmigrant-status.

- Person with extraordinary ability in the sciences, art, education, business, or athletics (O visa)
- Internationally recognized athlete or member of an internationally recognized entertainment group (P visa)
- Person in a religious occupation (R visa)

DHS believes that these categories, together with fiancés or spouses of U.S. citizens and the children of such fiancés or spouses (K visa), are the likely visa categories under which a nonimmigrant could obtain a degree without being in F-1 nonimmigrant status. From 2010 to 2014, an average of 6,821 nonimmigrants annually changed status from one of these nonimmigrant classifications to the F-1 classification.[33] Again, DHS is not aware of any data to estimate the number of these nonimmigrants who may have obtained a degree while in a classification other than F-1. Therefore, DHS uses the below reasoned analysis to develop an estimate. DHS requests comment on this analysis, especially data or information that may help determine the size of this population.

There are certain benefits to remaining in non-F-1 nonimmigrant status, such as the ability in certain circumstances to establish residency and obtain in-state tuition. However, drawbacks to remaining in non-F-1 nonimmigrant status are limitations or prohibitions on working or volunteering in certain positions. If a nonimmigrant is planning to study full-time, it often is beneficial to him or her to change to F-1 status at least one year prior to graduation to gain eligibility for the practical training opportunities and related work authorization benefits of the F-1 classification. For this reason DHS believes that students would have a strong incentive to change their visa status before finishing their degree. Therefore, DHS estimates a range of

[33] USCIS, Office of Performance and Quality, July 2015.

between 5 and 50 percent of nonimmigrants who changed to F-1 nonimmigrant status annually have already obtained a degree before changing status, with a primary estimate of 20 percent.[34] In addition, of those students, DHS assumes that 37 percent would have obtained the degree in a STEM field.[35] Finally, DHS applies the 70 percent participation rate and 0.56 unaccredited rates to this population to estimate 351 students in this population beginning participation in the first year of the new program.[36]

Adding these 351 students to the previously mentioned group of 108 students with prior STEM degrees earned while in F-1 status, DHS finds that 459 students eligible for this rule's STEM OPT extension based on prior STEM degrees would join the new program during its first year of implementation. Similar to the previous STEM OPT extension population growth assumptions, DHS applies the 15 percent growth rate for year 2 through 5 and the 11 percent growth rate to years 6 through 10 to estimate the annual population of students applying for a STEM extension under a prior STEM degree.

Students who would be eligible based upon a second qualifying STEM degree earned at a higher education level

The proposed rule would also allow students to obtain a second 24-month STEM OPT extension if they obtain a second STEM degree at a higher degree level, thus removing the current once-in-a-lifetime cap on STEM OPT extensions. Since 2010, an average of 410

[34] An NSF report indicates that of the scientists and engineers in the United States holding an advanced degree from a U.S. institution, approximately half received their first bachelor's degree in the United States. Because this also includes those that graduated in F-1 status, DHS uses 50 percent as the maximum bound. Because there are significant incentives to change to an F-1 before graduation, DHS chooses a significantly lower estimation of 20 percent as the primary estimate.
National Science Foundation, Science and Engineering Indicators 2014, Chapter 3 Science and Engineering Labor Force, Sources of Education. Available at: http://www.nsf.gov/statistics/seind14/index.cfm/chapter-3/c3s6.htm

[35] ICE, SEVIS by the Numbers, February 2015, page 23. Available at: http://www.ice.gov/sites/default/files/documents/Document/2015/by-the-numbers.pdf.

[36] 6,821 eligible students × 20 percent obtain a degree × 37 percent are a STEM degree × 70 percent participation × (1-.0056 unaccredited) = 351.

students per year have graduated with a second STEM degree after having earned a prior STEM degree while in F-1 nonimmigrant status.[37] DHS applies the 70 percent participation rate and 0.56 unaccredited rate to this population to estimate 285 students in this population beginning participation in the first year of the new program.[38] DHS uses an 11 percent growth rate to estimate the annual population of students participating in the program who benefit from this change.[39] Unlike the two previous STEM OPT populations, however, DHS does not use the additional 3.9 percent growth (i.e., 15 percent growth in years 2 through 5). This is because the 3.9 percent figure refers to the increase in students using the STEM OPT extension; as the students described in this section have already utilized the STEM OPT extension, there is no assumed additional growth in this population. Therefore, DHS uses the 11 percent growth rate for years 2 through 10.

Students who would be eligible with a potential change to the current STEM-Designated Degree Program list

The 2008 IFR first introduced the STEM Designated Degree Program list, which includes all Department of Education's CIP codes that are eligible for the current 17-month extension. The list is maintained on SEVP's website. The NPRM proposes a definition for STEM fields of study and a new process for updating the list. These changes may result in an expansion of the number of degrees that could enable students to qualify for the extension and thus increase participation in the program. Based upon preliminary internal discussions, DHS estimates that the population eligible for the STEM OPT extension is estimated to increase by approximately 10 percent. Applying this 10 percent figure to the estimated number of original STEM OPT

[37] SEVIS, Data retrieved June 5, 2015.
[38] 410 eligible students × 70 percent participation × (1-.0056 unaccredited) = 285.
[39] As discussed previously, 11.5% is the compound annual growth rate in the number of F-1 visas issued, and 11% is the compound annual growth rate in the number of F-1 nonimmigrant students graduating with a STEM degree.

extension students previously estimated in year 1 of the analysis, DHS estimates that 2,910 students in this population might participate in year 1.[40] As with the first two STEM OPT populations described above, DHS also uses the 15 percent growth rate for this population of students requesting an extension in years 2 through 5 and 11 percent in years 6 through 10.

Students who would be eligible to increase their current extension period from 17 months to 24 months.

The 2008 IFR allowed students to apply for a 17-month STEM OPT extension. If the proposed rule were finalized, certain students who have obtained the 17-month extension would be eligible to apply for the balance of a 24-month extension if they meet the proposed regulatory criteria. Such requesting students would have to meet all requirements of the new STEM OPT extension proposal, including submission of the Mentoring and Training Plan. The preamble of the proposed rule provides details on the proposed regulatory requirements for the 24-month extension, and a discussion of the impacts of those requirements follows in this regulatory impact analysis. DHS refers to these students as transitional students, as they would be eligible to apply for a transition from their 17-month STEM OPT extension to a 24-month STEM OPT extension, so long as they request the balance of the modified extension up to 120 days before the end of the their 17-month periods.

For purposes of this analysis, DHS assumes the proposed rule would be finalized and effective in February 2016. And as noted above, DHS proposes that qualifying students would be able to request the balance of the modified extension up to 120 days before the end of the student's 17-month period. This would mean that students who have started their STEM OPT extension after January 2015 would have enough time left on their 17-month STEM extension to apply for the additional extension. Students who have over 120 days available on their 17-month

[40] 29,100 × 10 percent = 2,910.

extension at the anticipated February 2016 final rule effective date would have enough time to apply for the balance of the 24 month maximum extension.

To estimate this transitional population, DHS retrieved data from SEVIS for students who had an employment start date on or after February 13, 2015, and who would therefore have at least 120 days or more of authorized STEM-OPT employment still remaining on February 13, 2016. Based on these two date-sensitive criteria, DHS estimates the transitional population of students would be 18,313. Of these students, DHS applies a 0.56 percent reduction for students from unaccredited schools (who would be ineligible for the extension) to estimate 18,210 students who would apply for the 24 month-extension. This number could be an underestimate, as additional students could apply and be approved for the 17-month extension between the time of this analysis and the final effective rule. This number could also be an overestimate, as some students on the 17-month extension may choose not to apply for the increased extension due to additional costs and proposed regulatory requirements associated with such an application. In short, the estimate herein is based on a snapshot of the population and could vary based on these as well as other qualifying factors for student eligibility described in the preamble of the proposed rule.

Total STEM OPT Population Estimate under the Proposed Rule

Using the estimates and assumptions established in the above discussion, the below table presents a summary of the estimated total annual number of students participating in the STEM OPT extension program under the proposed rule.[41]

[41] To the extent that in the future more students may attend accredited schools, these estimates may be underestimated. However, DHS is unable to predict future actions by students.

Table 4: Primary Summary of New STEM OPT Student Extension Request

Year	Transitional Population from 17 month to 24 month Extension	New STEM OPT Extension Students from Accredited Schools	Increased CIP List Eligibility	Prior STEM Degrees	Second STEM Degree	**Total STEM OPT Population Impacted**[42]
1	18,210	29,100	2,910	459	285	**50,964**
2		33,465	3,347	528	316	**37,656**
3		38,485	3,848	607	351	**43,291**
4		44,257	4,426	698	390	**49,771**
5		50,896	5,090	803	433	**57,221**
6		56,495	5,649	891	480	**63,515**
7		62,709	6,271	989	533	**70,502**
8		69,607	6,961	1,098	592	**78,257**
9		77,264	7,726	1,219	657	**86,866**
10		85,763	8,576	1,353	729	**96,421**

*Estimates may not total due to rounding.

DHS also provides a low and high population estimate based on uncertainty in certain assumptions that were discussed previously. The low estimate assumes an 11 percent growth rate for STEM OPT participants through years 2-10 and that 5 percent of students who changed status to the F-1 classification had obtained a prior eligible STEM degree while in non-F-1 status. The high estimate assumes a 15 percent growth[43] rate for STEM OPT participants through years 2-10 and that 50 percent of students who changed status to the F-1 classification had obtained a prior eligible STEM degree while in non-F-1 status.

[42] This column represents how many students may apply to DHS for a STEM OPT extension annually. It does not estimate how many students may have F-1 status pursuant to a STEM OPT extension in that year.
[43] DHS uses the 15 percent growth rate for all STEM OPT populations in years 2-10, except for students who would be eligible based upon a second qualifying STEM degree earned at a higher education level. DHS uses the 11 percent growth rate for this population in years 2-10.

Table 5: Low Summary of New STEM OPT Student Extension Request

Year	Transitional Population from 17 month to 24 month Extension	New STEM OPT Extension Students from Accredited Schools	Increased CIP List Eligibility	Prior STEM Degrees	Second STEM Degree	**Total STEM OPT Population Impacted**
1	18,210	29,100	2,910	198	285	**50,703**
2		32,301	3,230	220	316	**36,067**
3		35,854	3,585	244	351	**40,035**
4		39,798	3,980	271	390	**44,438**
5		44,176	4,418	301	433	**49,327**
6		49,035	4,904	334	480	**54,753**
7		54,429	5,443	370	533	**60,775**
8		60,416	6,042	411	592	**67,461**
9		67,062	6,706	456	657	**74,881**
10		74,439	7,444	506	729	**83,118**

Table 6: High Summary of New STEM OPT Student Extension Request

Year	Transitional Population from 17 month to 24 month Extension	New STEM OPT Extension Students from Accredited Schools	Increased CIP List Eligibility	Prior STEM Degrees	Second STEM Degree	**Total STEM OPT Population Impacted**
1	18,210	29,100	2,910	988	285	**51,493**
2		33,465	3,347	1,136	316	**38,264**
3		38,485	3,848	1,307	351	**43,991**
4		44,257	4,426	1,503	390	**50,576**
5		50,896	5,090	1,728	433	**58,146**
6		58,530	5,853	1,987	480	**66,851**
7		67,310	6,731	2,285	533	**76,859**
8		77,407	7,741	2,628	592	**88,367**
9		89,018	8,902	3,022	657	**101,598**
10		102,370	10,237	3,476	729	**116,812**

5. Costs

This proposed rule expands the number of students eligible to take advantage of an OPT extension based upon a STEM degree. For these newly eligible students, the cost of the proposed rule would be equivalent to the requirements in place for students currently able to participate in the 2008 IFR's 17-month program, as well as any new costs from the changes proposed in this regulation. For students who were previously eligible for the 17-month program (2008 IFR), the cost would include previous requirements from the 2008 IFR and any new requirements proposed by this rulemaking. Both populations of STEM OPT students, and associated costs, are addressed below. The proposed rule does add new requirements on students, employers, and DSOs for participation in the program. These requirements and associated costs are addressed below.

Wages

Consistent with other DHS rulemakings, DHS uses wage rates as a mechanism to estimate the opportunity cost associated with completing the proposed requirements. The discussion below addresses the wage rate assumptions in the analysis.

Students on post-completion OPT extensions have already obtained their degrees and been authorized to work by USCIS. In addition, under the proposed rule these students would be required to receive compensation commensurate to compensation for similarly situated workers through their STEM OPT employers. Therefore, as a proxy for opportunity cost for these students, DHS uses an estimate of their average wages.

STEM students can occupy a range of occupations. For the purposes of estimating an average STEM wage, DHS uses the 184 occupations recommended by a working group formed by the U.S. Department of Labor's Bureau of Labor Statistics Standard Occupational

Classification (SOC) Policy Committee in 2012.[44] DHS also uses wage data collected under the Occupational Employment Statistics (OES) program for use in the Foreign Labor Certification process from the Foreign Labor Certification Data Center.[45] DHS uses an average of Level 1 wages for the 184 identified STEM occupations across all geographic areas. Level 1 wages are for entry level employees, such as a worker in training or an internship.[46] DHS then uses BLS data on the total number of employees in each SOC (regardless of skill level or immigration status) to estimate a weighted average wage rate for STEM OPT students.[47] Following this process, DHS estimates a weighted average wage rate of $23.81. Applying the 1.46 multiplier to account for the full cost of employee benefits (such as paid leave, insurance, and retirement), DHS estimates a time value of $34.76 per hour for students participating in the STEM OPT extension.[48]

DHS uses the U.S. Department of Labor, Bureau of Labor Statistics (BLS) occupation Educational, Guidance, School, and Vocational Counselors occupational code as a proxy for DSOs. The average wage rate for this occupation is estimated to be $26.94 per hour.[49] When

[44] Bureau of Labor Statistics, Defining STEM Occupations under the 2010 SOC, Attachment C: Detailed SOC occupations included in STEM, available at: http://www.bls.gov/soc/Attachment_C_STEM.xls.
[45] Foreign Labor Certification Data Center, Online Wage Library, 7/2013-6/2014 FLC Wage Data, ALC_Export File, available at: http://www.flcdatacenter.com/download/OWL_2014_TEXT.zip.
[46] This assumption is for purposes of this analysis only, and DHS expects that STEM OPT extension participants with higher-level degrees would be compensated at a higher level.
[47] Bureau of Labor Statistics, Occupational Employment Statistics, May 2014 National Occupational Employment Wage Estimates, Total Employment by SOC, available at: http://www.bls.gov/oes/special.requests/oesm14nat.zip.
[48] Bureau of Labor Statistics, Employer Costs for Employee Compensation, Table 1. Employer costs per hour worked for employee compensation and costs as a percent of total compensation: Civilian workers, by major occupational and industry group, June 2014." Available at http://www.bls.gov/news.release/archives/ecec_09102014.htm . Accessed May 20, 2015. Calculated by dividing total compensation for all workers of $31.96 by wages and salaries for all workers of $21.95 per hour (yields a benefits multiplier of approximately 1.46 × wages).
[49] May 2014 Occupational Employment and Wage Estimates, National Cross-Industry Estimates, "21-1012 Educational, Guidance, School, and Vocational Counselors," Hourly Mean "H-mean," http://www.bls.gov/oes/2014/may/oes211012.htm (last modified Mar. 25, 2015).

the costs for employee benefits such as paid leave and health insurance are included, the full cost for an hour of DSO time is estimated at $39.33 ($26.94 × 1.46).

A portion of the proposed rule requires action by an appropriate employing official with signatory authority. DHS assumes that this function is most likely to be completed by a manager serving in a human resources capacity. Therefore, DHS uses the BLS occupation Human Resources Managers occupational code as a proxy for an appropriate employing official with signatory authority. The average wage for this occupation is estimated to be $54.88 per hour.[50] When the costs for employee benefits are included, the full cost for an hour of time is estimated at $80.12 ($54.88 × 1.46).

The proposed rule also requires action by a supervisor of the student at the practical training site. DHS uses the average wage for all management occupations as a proxy for estimating the opportunity cost of the supervisor. The average wage for this category of occupations is estimated to be $54.08 per hour.[51] When the costs for employee benefits are included, the full cost for an hour of time is estimated at $78.96 ($54.08 × 1.46).

The proposed rule also requires action by a human resource specialist or equivalent level position from the employer of the student. DHS uses the average wage for human resource specialists as a proxy for estimating the opportunity cost of the employer's time to address human resource related requirements. The average wage for this occupation is estimated to be

[50] May 2014 Occupational Employment and Wage Estimates, National Cross-Industry Estimates, "11-3121 Human Resources Managers," Hourly Mean "H-mean," http://www.bls.gov/oes/2014/may/oes113121.htm (last modified Mar. 25, 2015).
[51] May 2014 Occupational Employment and Wage Estimates, National Cross-Industry Estimates, "11-0000 Management Occupations," Hourly Mean "H-mean," http://www.bls.gov/oes/2014/may/oes110000.htm (last modified Mar. 25, 2015).

$30.09 per hour.[52] When the costs for employee benefits are included, the full cost for an hour of time is estimated at $43.93 ($30.09 × 1.46).

Mentoring and Training Plan Form & Validation Check-Ins

The proposed rule requires assurance that STEM OPT participants obtain skills, knowledge, and competencies through a structured process that requires students to develop, with their employers, a mentoring plan by completing and signing the Mentoring and Training Plan form. When completed, students would be required to submit the Mentoring and Training Plan form to their DSOs when requesting the STEM OPT extension. The DSO must retain a copy of the form. Students requesting the STEM OPT extension may also be required to submit the form to ICE and/or USCIS upon request.[53]

Additionally, students would be required to update the form every six months to include a progress report on his or her accomplishments and skills or knowledge obtained. Employers must sign the six-month evaluation. The 2008 IFR previously required six-month student validation check-ins with DSOs, and this proposed rule would maintain the validation check-in requirement. While the DSO would be in communication with the student during the six-month validation check-in, DHS proposes to add an additional requirement that DSOs would also check to ensure the evaluation has been properly completed and maintain the evaluation for SEVP access in electronic or hard copy form.

[52] May 2014 Occupational Employment and Wage Estimates, National Cross-Industry Estimates, "13-1071 Human Resource Specialists, Detail," Hourly Mean "H-mean," http://www.bls.gov/oes/2014/may/oes131071.htm (last modified Mar. 25, 2015).

[53] The preamble of the proposed rule discusses examples of instances when the Mentoring and Training Plan may be requested by ICE or USCIS.

Initially Completing the Mentoring and Training Plan Form

Initially, the Mentoring and Training Plan form would be in a fillable PDF format that students can use, edit, and electronically send to employers. DHS estimates the number of annual students required to fill out the form as part of their STEM OPT extension as (1) STEM OPT students from accredited schools who would likely have applied for the previously allowed 17-month extension under the 2008 IFR, (2) students who may be newly eligible for the extension under a revised STEM Designated Degree Program list, (3) students now eligible for a STEM OPT extension based upon a prior STEM degree from an accredited school, (4) students earning a second eligible STEM degree, and (5) students transitioning from 17-month extensions to 24-month extensions (in the first year of this analysis).

The following sections describe the student's, DSO's and employer's burden for compliance requirements. Following these descriptions, the cumulative ten-year costs are calculated for 24-month extensions. DHS then separately describes the costs that are attributed to STEM OPT extensions for transitional students. Transitional students who are already engaged in their 17-month STEM extension would have initial Mentoring and Training Plan and application costs similar to students newly applying for a STEM OPT extension. The costs for transitional students will vary based on the number of months they have left on their current 17-month extensions. Data was available for this population in SEVIS, and included the start date of STEM employment. DHS developed specific costs that better reflect the transitional student population cost rather than simply applying a standard cost for a full 24-month extension.

Student Burden

DHS estimates that a majority of the Mentoring and Training Plan form would be completed by student applicants. DHS estimates that each form takes approximately 1.5 hours to complete initially.[54] DHS uses an opportunity cost of time to estimate the burden on students for initially filling out the form and receiving employer approval. Students must then provide the completed form to his or her DSO to request the OPT extension. DHS estimates that this additional step would require 10 minutes, resulting in an initial burden of 1.67 hours (1.5+0.17). DHS estimates that the opportunity cost for STEM OPT extension students to initially complete the form is $58.05 per form (1.67 hrs × $34.76 per hour).

Employer Burden

Employers would be required to provide information for certain fields, review the completed form, and attest to the certifications on the form. DHS estimates that this initial process requires approximately 30 minutes of time by the supervisor as well as 30 minutes by someone at the employer with signatory responsibility. DHS estimates that the employer would have a human resources specialist, or equivalent position, spend an hour reviewing and documenting wage and hour data to meet the proposed rule's commensurate compensation and hours requirements. DHS assumes that this hour burden may be a high estimate, as employers may already pay STEM OPT students equivalent wages to their U.S. worker counterparts. Therefore some employers may not have to create a new process to review wages. DHS requests comments on these assumptions. For the initial completion of the form, DHS estimates an

[54] DHS modeled its form after the Department of State, Training/Internship Placement Plan Form DS-7002, OMB Control No. 1405-0170. Burden estimates for this form are available in the Information Collection Request Supporting Statement, Question 12. Available at: http://www.reginfo.gov/public/do/DownloadDocument?documentID=525840&version=1.

opportunity cost of $40.06 (0.5 hr × $80.12) for an official with signatory authority, of $39.48 (0.5 hr × $78.96) for a supervisor, and of $43.93 (1 hr x $43.93) for a human resources specialist.

DSO burden

DSOs are required to ensure the form has been signed and completed prior to making a recommendation in SEVIS. Schools are required to ensure SEVP has access to student evaluations (electronic or hard copy) for a period of at least three years following the completion of each STEM practical training opportunity. Schools already have recordkeeping requirements and associated practices in place for student records. Specifically, current regulations state that "Student information not required for entry in SEVIS may be kept in the school's student system of records, but must be accessible to DSOs. The school must keep a record of having complied with the reporting requirements for at least three years after the student is no longer pursuing a full course of study."[55] Therefore, the new proposed recordkeeping requirement for DSOs to maintain a copy of the Mentoring and Training Plan form should only result in a small incremental burden to DSOs. DHS includes an opportunity cost of time for reviewing the form to ensure its proper completion and for filing the record either electronically or in a physical folder.

DHS estimates the form review would take 15 minutes and an additional 5 minutes to properly store the record. DHS estimates a total opportunity cost for DSOs of $13.09 for this time ((0.25 hrs for review + 0.083 hrs for recordkeeping) × $39.33).

Mentoring and Training Plan Form – Six-Month Evaluations

DHS estimates each six-month evaluation would take approximately one hour for the student to complete, including time to get the required supervisor's approval and provide the

[55] 8 CFR 214.3(g)(1).

completed evaluation to his or her DSO, although time would vary by student. Additionally, DHS would maintain the six-month validation report requirement from the 2008 IFR, and DHS estimates that meeting this requirement would take an additional 10 minutes for the student. DHS requests comments on these assumptions. Many employers conduct annual and bi-annual performance evaluations of employees. Students would be able to use this self-evaluation to prepare for any such performance review. The estimated opportunity cost for a STEM OPT extension student to complete his or her six-month evaluations and validations for the entire 24-month period is $162.68 (4 evaluations × 1.17 hour each × $34.76 per hour).

Employers would review the student's evaluation and sign as certification. According to a Society for Human Resource Management survey, almost three-quarters of organizations (72 percent) conduct performance reviews annually and 16 percent conduct reviews twice a year.[56] Only three percent of organizations do not conduct performance reviews. DHS believes that such a review could be incorporated into these discussions. Additionally, because many employers conduct performance evaluations on employees, supervisors should be familiar with such written products. DHS estimates approximately 15 minutes of a supervisor's time per evaluation. DHS welcomes comments on this time burden estimate. The estimated opportunity cost for supervisors of a STEM OPT extension student for the six-month evaluations for the entire 24-month period is $78.96 (4 evaluations × 0.25 hrs each × $78.96 per hour).

Under the 2008 IFR, a student with a STEM OPT extension would have to make a validation report to the DSO every six months, and the DSO is required to report this information to SEVIS. The validation is a confirmation that the student's information in SEVIS is current and accurate. A student with a STEM OPT extension would be required to make a validation

[56] Society for Human Resource Management, Survey Findings: HR Professionals' Perceptions About Performance Management Effectiveness, slide 2, http://www.shrm.org/Research/Documents/2014-Performance-Managment.pptx.

report to the DSO every six months starting from the date of the extension, within 10 business days, and ending when either: (a) the student's F-1 status ends; (b) the STEM OPT extension period ends; or (c) the student changes educational levels at the same school or the student transfers to another school or program, whichever occurs first. The DSO would also be responsible for updating the student's record in SEVIS within 21 days. The DSO would also report in SEVIS when the employer of a student with the 17-month OPT extension reports that the student no longer works for that employer. The proposed rule would maintain these previous 2008 IFR requirements for six-month validation reports. DHS estimates each report or update takes an estimated ten minutes.[57] During a 24-month period, the six-month reporting requirement would result in four reports. In addition, each report is likely to take longer with the additional responsibility for students to submit the six-month evaluations on the Mentoring and Training Plan form to DSOs and for the DSO to file such a record. DHS estimates an additional 10 minutes per DSO validation report for these actions. DHS requests comments on these burden estimates. DHS estimates the opportunity cost for DSOs for the twenty minutes for validation check-ins to be $52.39 (0.333 hrs × 4 validation check-ins × $39.33 per hr).

For each student eligible for the STEM OPT extension, this results in 20 minutes for the four validation check-ins and evaluations (24/6) per student on a 24-month extension. The proposed rule would only allow a STEM OPT extension for 24 months for the first qualifying STEM degree completed by the student. If a student completes another qualifying degree at a higher degree level than the first or has an additional prior STEM degree that qualifies, another extension would be allowed for an additional 24 months. Thus for the population of students

[57] 73 FR 18951.

applying for their second STEM OPT extension, DHS uses four validation check-ins (24/6) to assess the burden.

Additional Implementation Costs

Schools and employers may incur organizational costs to understand the rule's requirements and develop plans to implement the rule. These costs are in addition to the specific implementation costs schools and employers are estimated to incur. This potential burden could result from the time required to read the rulemaking, the time required to research and implement any changes to general policies or procedures, or other costs of overall planning and execution. This is exclusive of the opportunity costs estimated above.

To account for these costs, DHS adds an additional category of implementation costs for schools and employers. Implementation will vary by the size of the school or facility, the number of DSOs, the school or employer's experience with STEM OPT extensions, and the number of STEM OPT students at each school or employer. However, implementation costs should be proportionate to the anticipated costs under the proposed rule. Therefore, DHS uses a cost-based approach, assuming the overhead rate will be some percentage of the total estimated cost on a per practical training opportunity basis. Similar to other DHS rulemakings, DHS assumes additional implementation costs as 10 percent of the total costs to organizations affected by the rulemaking. DHS requests comment on this assumption.

Total Cost for Mentoring and Training Plan, Evaluations and Validation Check-Ins

The table below summarizes the costs related to the initial completion of the form, the evaluation requirements, and the validation requirements for the STEM OPT extension population under the proposed rule.

Table 7: STEM OPT Students – Summary of Costs per Mentoring and Training Plan and Evaluations and Validation Check-Ins

Require-ment	**Student** ($34.76 per hr)	**Person with Signatory Authority** ($80.12 per hr)	**Supervisor** ($78.96 per hr)	**HR Specialist** ($43.93 per hr)	**DSO** ($39.33 per hr)	**Implemen-tation** (10% of school and employer costs)	**Total**
Initially Completing Form	**$58.05** (1.67 hrs x $34.76)	**$40.06** (0.5 hrs x $80.12)	**$39.48** (0.5 hrs x $78.96)	**$43.93** (1 hrs x $43.93)	**$13.09** ((0.25 hrs + 0.083 hrs) x $39.33)	**$13.66** (($40.06 + $39.48 + $43.93 + $13.09) x 10%)	**$208.27**
Evaluations & Validation Check-Ins	**$162.68** (1.17 hr x 4 Evals x $34.76)	N/A	**$78.96** (0.25 hrs x 4 Evals x $78.96)		**$52.39** (0.333 hrs x 4 Validation Check-ins, x $39.33)	**$13.09** (($78.96 + $52.39) x 10%)	**$306.65**

*Estimates may not total due to rounding.

**DHS expects that to the extent a STEM OPT employer does not currently engage in directed mentoring or supervision of entry-level employees, the proposed rule would impose additional burdens not fully captured by the monetized estimates in this analysis. This burden would be the inevitable result of DHS requiring that the STEM OPT student and employer focus specifically on the academic benefit of the STEM extension, and may be offset by additional countervailing benefits to the student and employer.

Table 9 applies the costs to the STEM OPT extension populations for an estimate of the total Mentoring and Training Plans cost under the proposed rule. The table below presents the previously established estimated annual number of students in five categories. DHS develops the costs for the 18,210 transitional students applying to change from 17-month to 24-month extensions in a separate section below.

Table 8: Summary of New STEM OPT Student Extension Request

Year	New STEM OPT Extension Students from Accredited Schools	Increased CIP List Eligibility	Prior STEM Degrees	Second STEM Degree	Total STEM OPT Population New Extension Not-Transitional	Transitional Population from 17 Month to 24 Month Extension	Total STEM OPT Population Impacted
1	29,100	2,910	459	285	**32,754**	18,210	**50,964**
2	33,465	3,347	528	316	**37,656**		**37,656**
3	38,485	3,848	607	351	**43,291**		**43,291**
4	44,257	4,426	698	390	**49,771**		**49,771**
5	50,896	5,090	803	433	**57,221**		**57,221**
6	56,495	5,649	891	480	**63,515**		**63,515**
7	62,709	6,271	989	533	**70,502**		**70,502**
8	69,607	6,961	1,098	592	**78,257**		**78,257**
9	77,264	7,726	1,219	657	**86,866**		**86,866**
10	85,763	8,576	1,353	729	**96,421**		**96,421**

*Estimates may not total due to rounding.

Table 9: STEM OPT Extension Request Population – Total Cost for Mentoring and Training Plan, Evaluations and Validation Check-Ins ($ millions)

Year	STEM OPT Extension Students	Initially Completing Form (Students x $208.27)/1,000,000	4 Evals & Validation Check-Ins (Students x $306.65) /1,000,000	Total
1	32,754	$6.8	$10.0	**$16.9**
2	37,656	$7.8	$11.5	**$19.4**
3	43,291	$9.0	$13.3	**$22.3**
4	49,771	$10.4	$15.3	**$25.6**
5	57,221	$11.9	$17.5	**$29.5**
6	63,515	$13.2	$19.5	**$32.7**
7	70,502	$14.7	$21.6	**$36.3**
8	78,257	$16.3	$24.0	**$40.3**
9	86,866	$18.1	$26.6	**$44.7**
10	96,421	$20.1	$29.6	**$49.6**
Total				**$317.3**

*Estimates may not total due to rounding.

Transitional Population Costs for Training and Mentoring Plan, Evaluations and Validation Check-Ins.

DHS estimates that 18,210 transitional students in their 17-month STEM OPT period will be eligible and apply for the balance of the proposed 24-month extension period. These students will have already begun their 17-month extension and will only be allowed an additional 7 month extension beyond their original 17 months. They, however, will be required to comply with the new regulatory requirements, which will result in burdens for the students, the DSOs, and the employers. DHS assumes the burdens for the initial training and mentoring plan and the evaluations and validation check-ins will be similar to those of students who are newly applying for STEM OPT extensions, and such costs are listed in Table 7.

Depending on when the student began his or her 17 month STEM OPT extension, he or she would have differing amounts of time left to be compliant with the new requirements. For the purposes of this analysis, DHS assumes an effective date for a final regulation in February 2016. For transitional students to be eligible for the 24-month extension they would have had to start their 17-month extension after January 2015, as they would need to have a balance of at least 120 days available to apply for the additional extension. Based on the population of students on STEM OPT extensions who started in February 2015, DHS reviewed the amount of time each student would have remaining on February 2016 to ascertain how many evaluations would need to occur per student. Table 10 provides a description of the costs for the initial submission; the number of students who would receive two, three, or four evaluations depending on their remaining extension time; and the costs for evaluations. DHS assumes that students with less than 12 months remaining would still receive two evaluations (a six-month evaluation and a final evaluation).

Table 10: Transitional Student Training and Mentoring Plan and Evaluation and Validation Check-in Costs

Transitioning 17 month STEM OPT Students	Number of Initial Mentoring and Training Plan Submission	Total Number of Initial Submission for Transitional Students	Cost per Initial Training and Mentoring Plan	Transitional Student Initial Mentoring & Training Plan Cost (Students x $208.27)/1,000,000
18,210	1	18,210	$208.27	**$3.79**
Transitioning 17 month STEM OPT Students	**Number of Evaluations & Validation Check-ins Per Student After Applying for Higher Extension Period**	**Total Number of Evaluations & Validation Check-Ins per Category**	**Cost per Evaluation & Validation Check-Ins**	**Transitional Students Evaluations & Check-ins Cost (Total Number of Evaluations & Validation Check-Ins x $76.66)/1,000,000**
5,503	2	11,006	$76.66	$0.844
12,696	3	38,088		$2.920
11	4	44		$0.003
18,210		**49,138**		**$3.767**
Total Transitional Students Mentoring& Training Plan, Evaluation & Validation Check-in Costs				**$7.56**

*Estimates may not total due to rounding.

Table 11: Transitional Student & New STEM OPT Extension Population – Total Cost for Mentoring and Training Plan, Evaluations and Validation Check-Ins ($ millions)

Year	Transitional Students Mentoring and Training Plan, Evaluations and Validation Check-Ins Cost	New STEM OPT Students Mentoring and Training Plan, Evaluations and Validation Check-Ins Cost	Total Mentoring and Training Plan, Evaluations and Validation Check-Ins Cost
1	$7.6	$16.9	**$24.4**
2		$19.4	**$19.4**
3		$22.3	**$22.3**
4		$25.6	**$25.6**
5		$29.5	**$29.5**
6		$32.7	**$32.7**
7		$36.3	**$36.3**
8		$40.3	**$40.3**
9		$44.7	**$44.7**
10		$49.6	**$49.6**
Total			**$324.9**

*Estimates may not total due to rounding.

Form I-765 Costs for Eligible STEM OPT Extension Students

The proposed rule would make changes to the STEM Designated Degree Program list that could increase the number of STEM OPT extension eligible students, and to allow extension eligibility based upon a prior STEM degree or a second STEM degree at a higher level. Students would have to apply for an initial extension and separately apply for a second extension, as applicable to prior degrees or second degrees.

Once the DSO recommends a student for the STEM OPT extension, the student must submit a Form I-765, Application for Employment Authorization, and appropriate fees (as indicated in the form instructions) to USCIS. Students would incur costs such as time burdens and filing fees to be able to take advantage of the program. The student mails to USCIS the

completed Form I-765, the associated $380 application fee, recent taken photos, and all required documentation (e.g., copy of STEM degree, photocopy of last EAD, etc.).[58]

DHS includes a paperwork burden for eligible students to comply with the requirements to file the Form I-765 to obtain an Employment Authorization Document from USCIS. DHS includes an estimated 3 hours and 25 minutes per response (3.42 hours) for completion of the Form I-765, including the time for reviewing instructions as well as completing and submitting the form.[59] The current filing fee for Form I-765 is $380.[60] The fee is set at a level to recover the processing costs to DHS. In addition, applicants for employment authorization are required to submit two passport-sized photos with their application. DHS includes an estimated 0.5 hour in opportunity costs for the student to obtain new passport photos.[61] This requirement results in an estimated student opportunity cost of $136.26 per application ((3.42 + 0.5) hrs × $34.76 per hour). The estimated cost of purchasing two passport-sized photos is $20.00 per application based on Department of State estimates.[62] Students would also incur a postage cost for submitting this application. DHS estimates each package would cost approximately $5.75 to mail.[63] DHS sums the $380 filing fee, $20 photo cost, and $5.75 postage cost for a total cost of $405.75 per I-765 application, plus $136.26 in related opportunity costs. The ten-year total costs

[58] 8 CFR 214.2(f)(11)(i)(A).
[59] USCIS, Form I-765, Application for Employment Authorization, OMB Control No. 1615-0040, Information Collection Request Supporting Statement, Question 12. Available at: http://www.reginfo.gov/public/do/DownloadDocument?documentID=533932&version=2 (Accessed on May 26, 2015).
[60] 8 CFR 103.7(b)(HH).
[61] Source in footnote 59, Question 13 of the Support Statement.
[62] The Department of State estimates that the average cost of one passport-sized photo is $10.00 according to the Paperwork Reduction Act (PRA) Supporting Statement under OMB control number 1450-0004. The PRA Supporting Statement can be found at Question 13 on Reginfo.gov at http://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201102-1405-001.
[63] Based on using a United States Postal Service Priority Mail Small Flat Rate Envelope, price available at: http://postcalc.usps.com/ (Accessed on May 26, 2015).

for submitting the form I-765 are presented in the table below. Table 12 includes the transitional population student costs in year one.

Table 12: STEM OPT Extension Students – Form I-765 ($ millions)

Year	STEM OPT Extension Students	Opportunity Cost (Students x $136.26)/1,000,000	Fee (Students x $405.75) /1,000,000	Total
1	50,964	$6.9	$20.7	**$27.6**
2	37,656	$5.1	$15.3	**$20.4**
3	43,291	$5.9	$17.6	**$23.5**
4	49,771	$6.8	$20.2	**$27.0**
5	57,221	$7.8	$23.2	**$31.0**
6	63,515	$8.7	$25.8	**$34.4**
7	70,502	$9.6	$28.6	**$38.2**
8	78,257	$10.7	$31.8	**$42.4**
9	86,866	$11.8	$35.2	**$47.1**
10	96,421	$13.1	$39.1	**$52.3**
Total				**$343.9**

*Estimates may not total due to rounding.

Reporting Requirements

The proposed rule maintains the 2008 IFR's DSO and student reporting requirements. DSOs would be required to report in SEVIS whether there have been certain changes in a student's circumstances. Prior to the 2008 IFR, the student was already required to report to the DSO any changes in his or her address or his or her OPT employer's name and address. Under the proposed rule, the DSO would be required to report this information to SEVIS. Prior to the 2008 IFR, program familiarity and anecdotal evidence indicated that full compliance with such previously existing reporting requirements of the OPT program was lacking, which was the reason the reporting elements, including increased incentives, were included in the IFR. This proposed rule is maintaining the 2008 IFR's posture with respect to complying with reporting requirements, including providing enforceable requirements described above that could, if

compliance were found to be lacking, result in loss of the immigration benefits and associated privileges provided by the F-1 program for all parties. DHS estimates the increased incentive to comply with the proposed reporting requirements would result in 2 additional reports per student per 24-month extension period.[64] DHS estimates each reported event or update would require 10 minutes for students and DSOs. This requirement results in an estimated student opportunity cost of $11.82 (2 reports x 0.17 hrs × $34.76 per hour) and DSO opportunity cost of $13.37 (2 report x 0.17 hrs × $39.33 per hour) per STEM OPT extension application. DHS multiplies the number of students on an STEM OPT extension by the respective burden costs for a student and for a DSO, and does the same for the number of students on a second STEM OPT extension. The following tables display the ten year costs for the reporting burden, including the transitional students costs in year one.

[64] DHS uses SEVIS data on DSO reported events for STEM OPT extension students to estimate the number of reports per student. DHS retrieved data on 38 event codes (types of reported information) from SEVIS with 60,462 information change events between calendar 2014 and August 2015. DHS accounts for all DSO reporting events for STEM OPT in the burden estimates. For 17 month extensions available under the 2008 IFR, which the data represented, 60,462 reports were for 44,907 STEM OPT students, resulting in 1.346 reports per student. To account for 24 months, DHS calculates 1.9 = 1.346 +(24/17). DHS rounds these to 2 reports for a 24-month extension.

Table 13: STEM OPT Extension Students – Reporting Burden ($ millions)

Year	STEM OPT Extension Students	Student Opportunity Cost (Students x $11.82)/1,000,000	DSO Opportunity Cost (Students x $13.37)/1,000,000	Total Additional Reporting Costs
1	50,964	$0.6	$0.7	**$1.3**
2	37,656	$0.4	$0.5	**$0.9**
3	43,291	$0.5	$0.6	**$1.1**
4	49,771	$0.6	$0.7	**$1.3**
5	57,221	$0.7	$0.8	**$1.4**
6	63,515	$0.8	$0.8	**$1.6**
7	70,502	$0.8	$0.9	**$1.8**
8	78,257	$0.9	$1.0	**$2.0**
9	86,866	$1.0	$1.2	**$2.2**
10	96,421	$1.1	$1.3	**$2.4**
Total				**$16.0**

*Estimates may not total due to rounding.

Compliance Enforcement

The proposed rule makes clear that ICE, at its discretion, may conduct a site visit of a participating employer. An on-site review is intended to ensure that each employer meets program requirements, including that they are complying with assurances and that they possess the ability and resources to provide structured and guided work-based learning experiences outlined in students' Mentoring and Training Plans. Site visits would be performed at the discretion of ICE (either randomly or if ICE determines a visit is warranted). The length and depth of such a visit would be determined on a case-by-case basis.

For law enforcement reasons, ICE does not include an estimate of the basis for initiating a site visit and is unable to estimate the number of site visits that may be conducted, and thus is unable to provide a total annual estimated cost for such potential occurrences. However, based on previous on-site visits to schools, DHS estimates that an employer on-site visit may include a supervisor and take five hours. Based on past experience, DHS estimates on-site visits for

schools, as well as requests for evidence that may follow an on-site visit, generally take two hours to eight hours to conduct, including the time necessary for schools to gather and provide the requested information. With regards to employer versus school site visits, DHS will review fewer compliance measures with employers and thus uses the average of the two to eight hour time range, resulting in five hours per employer on-site compliance review. Therefore, DHS estimates that if an employer were to receive an on-site compliance review, it may cost the employer approximately $394.80 (5 hrs × $78.96 per hour).

DHS also proposes that a DSO be prohibited from recommending a student for a STEM OPT extension if the employer has not provided the assurances required by this rule or is otherwise not in compliance with the relevant reporting, evaluation and other requirements described in the proposed rule. As previously discussed, DHS is proposing to maintain previous DSO reporting responsibilities issued in the 2008 IFR. DSOs also currently have termination responsibilities, such as the requirement to terminate a student not attending class or maintaining status. Any time associated with reporting to USCIS and terminating the student's OPT from a failure by the employer to comply with the proposed requirements is included in the additional time described previously that DSOs would spend with students as a part of their six-month validation check-in and evaluation review or their time would be accounted for in the additional reporting requirement burdens. DHS requests comments from schools on these burden estimates.

E-Verify Requirements for STEM-OPT Extension Employers

DHS proposes to maintain the requirement that students who are granted a STEM OPT extension must be seeking employment with or employed by an employer that is enrolled in the E-Verify program. As part of the 2008 IFR, E-Verify enrollment was required for an employer

that wished to employ any student participating currently in or seeking employment pursuant to a STEM OPT extension. Employers previously subject to the 2008 IFR requirements also were required to use E-Verify for all new hires, not only students participating in STEM OPT extensions. Due to the fact that some of these compliant employers have already incurred start-up enrollment costs, the proposed rule will result in less of an impact on employers previously complying with the IFR, as compared to employers that will fall under the program for the first time. DHS assumes STEM OPT employers that have previously had to enroll in E-Verify and verify immigration status for all new hires would not incur additional enrollment or program initiation costs. Such employers, however, would have ongoing additional burdens for training in E-Verify, as they would have to continue to comply with E-Verify requirements to hire STEM OPT extension students.[65]

DHS also estimates the number of employers that would newly enroll in the E-Verify program. DHS believes the estimated number of newly affected employers from the proposed rule may be an overestimate, due to the increased use of E-Verify since the 2008 IFR. Since 2009, the federal government has mandated that certain federal contractors use the E-Verify program.[66] Additionally, around twenty states require the use of E-Verify for at least some public and/or private employers.[67] Moreover, the E-Verify program has improved on several key measures since its inception in 2007. For example, participation rates both in terms of the number of establishments enrolled and the number of transactions being processed have increased steadily since the program progressed from of its basic pilot phase in 2007. Between

[65] E-Verify is generally a voluntary program and employers may terminate their enrollment at any time upon 30 days prior written notice.
[66] FAR E-Verify, "Federal Acquisition Regulation; FAR Case 2007–013, Employment Eligibility Verification", Nov. 2008. http://www.gpo.gov/fdsys/pkg/FR-2008-11-14/pdf/E8-26904.pdf
[67] USCIS, E-Verify Overview, http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/e-verify-presentation.pdf Slide 7.

fiscal year (FY) 2008 and FY 2015, E-Verify participation by employers has increased by over 500 percent, and more than 28 million cases were run in FY 2014.[68] Accuracy, measured by the number of false Tentative Non-confirmations (TNCs) recorded, has also improved over the life of the system. In 2009, the erroneous TNC rate, a rate that describes a work eligible individual who was wrongly identified as being ineligible, was found to be 0.3 percent—a substantial improvement over the 0.7 percent observed in 2005.[69] As of 2015, the erroneous TNC rate has been reduced even further to 0.19 percent.[70] Additionally, employer sentiment toward the system has slightly improved since the first E-Verify customer satisfaction survey was conducted in 2010.[71] Due to these changes, DHS expects that the estimated number of employers that are newly enrolled as a result of this proposed rule is likely an overestimate.

Additionally, with respect to estimating compliance costs under the 2008 IFR for previously enrolled E-Verify employers, DHS assessed impacts to a percentage of these employers, as some would continue to use the program voluntarily. Based on prior research, DHS assumes 76 percent of previously compliant E-Verify employers under the 2008 IFR would continue to bear ongoing training and verification costs.[72] DHS assumes the remaining 24 percent of previous E-Verify employers would otherwise discontinue use of the program, and DHS assesses the cost of the proposed rule on these employers as if there are ongoing required

[68] U.S. Citizenship and Immigration Services, E-Verify Overview 8, available at http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/e-verify-presentation.pdf (noting that 87,758 employers were enrolled as of fiscal year 2008 compared to 568,759 employers as of fiscal year 2015, ((568759-87758)/87758) x 100).

[69] Evaluation of Accuracy of E-Verify Findings. USCIS. Accessed online at: http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/Everify%20Studies/Evaluation%20of%20the%20Accuracy%20of%20EVerify%20Findings.pdf.

[70] Program Performance. *USCIS*. Accessed online at: http://www.uscis.gov/e-verify/about-program/performance.

[71] E-Verify Customer Satisfaction Survey. *USCIS.* Accessed online at*:* http://www.uscis.gov/e-verify/about-program/e-verify-program-reports.

[72] Congressional Research Service, (CRS). *Electronic Employment Eligibility Verification*. Mar. 2013. The CRS report suggests that 24 percent of employers who had enrolled in E-Verify but who had either not used it or stopped using it said that they had decided the system "would be too burdensome to use."

burdens for participation in the program. DHS welcomes comments and data on these assumptions.

In maintaining the 2008 IFR requirements for employers of students who obtained a STEM OPT extension, the proposed rule would require employers to enroll in E-Verify and to continue to verify all new hires. DHS has estimated the employer costs for the continuation of verifications as well as programmatic costs such as annual training burdens. In addition to the employers that have previously enrolled costs, DHS accounts for new employers that would enroll in E-Verify and verify all new hires.

E-Verify STEM-OPT Currently Enrolled Employers

Between 2010 and 2014, a total of 26,260 employers enrolled or were previously enrolled in E-Verify and employed an F-1 student on a 17-month STEM-OPT extension.[73] The 2008 IFR required such employers to enroll in E-Verify, sign the associated Memorandum of Understanding (MOU) with DHS and the Social Security Administration, and use E-Verify for all new hires (including STEM OPT students and other new employees). Based on an annual growth rate of 0.19, DHS estimates the first year population of STEM OPT employers would be 14,052.[74] Based on the assumption that 76 percent of previously compliant employers would voluntarily continue to use E-Verify, DHS reduces the previous year's population by 76 percent. In 2015, DHS estimates there will be 11,808 (9,923 x 1.19) E-Verify STEM OPT employers, and that in 2016, 76 percent of these would continue to use E-Verify. DHS assumes the remaining 24 percent of STEM OPT employers would have a required ongoing burden imposed by the

[73] SEVIS contains the number of STEM OPT employers who were required to enroll and participate in E-Verify for all new hires in order to employ a STEM OPT student. DHS does not have sufficient data to determine the percentage of these employers would not have enrolled in E-Verify but for the STEM OPT extension. DHS therefore expects that the cost estimates provided below may overestimate the projected costs of this provision.

[74] Based on SEVIS data, 9,923 employers had employed a STEM-OPT student in 2014, and 5,001 employers in 2010. Compound annual employer growth rate = 0.19 = (9,923/5,001)^(1/4)-1. For year 1, 2016, DHS calculated =9,923 x (1+0.19)^2 to account for growth in 2015 = 14,052.

proposed rule, resulting in a sub-population of previous E-Verify STEM OPT employers of 2,834 (11,808 x 0.24). DHS continues, in subsequent years, to reduce the previous year total STEM OPT employer population by 76 percent. Therefore to calculate the previously enrolled employers that would have a required burden in year two, DHS multiplies the total STEM OPT employer population of 14,502 in the previous year (Year 1) by 0.24 to get 3,327 previously enrolled employers with a required burden. Additionally, DHS accounts for an annual increase based on new employers hiring STEM OPT students, and assumes ongoing costs for these employers, but also accounts for initial enrollment costs and start-up costs. The following table summarizes the estimated population of E-Verify employers over the ten-year period of the analysis.

Table 14: Summary of STEM OPT E-Verify Employers

Year	All STEM-OPT Employers (Previously Enrolled + Growth Annual Total)	Previous Years Enrolled Employers Who Would Discontinue E-Verify W/O Proposed Rule (Previous Yr All STEM OPT Employers x (0.24)	New STEM OPT Employers from Growth (Previous Yr All STEM OPT Employers x 0.19)	Total STEM-OPT Employers with Burden Resulting from Proposed Rule
1	14,052	2,834	2,244	**5,078**
2	16,722	3,372	2,670	**6,042**
3	19,899	4,013	3,177	**7,190**
4	23,680	4,776	3,781	**8,557**
5	28,179	5,683	4,499	**10,182**
6	33,533	6,763	5,354	**12,117**
7	39,904	8,048	6,371	**14,419**
8	47,486	9,577	7,582	**17,159**
9	56,508	11,397	9,022	**20,419**
10	67,245	13,562	10,737	**24,299**
Total				**125,462**

Year 1 previously enrolled employers based on an estimated total enrolled population in 2015 of 11,808.

*Estimates may not total due to rounding.

The E-Verify requirement will result in an annual cost burden for employers, which are either newly enrolled or would discontinue E-Verify use without the proposed rule, to verify the

work authorization status of employees. Based on the most recent Paperwork Reduction Act Information Collection Package for the E-Verify program, DHS estimates the burden per employee as well as the number of new employee cases per employer.[75] The most recent supporting statement for the E-Verify program estimates a burden of 7.68 minutes[76] for an initial case submission per employee, and an additional 3.6[77] minutes of re-verifications for approximately 54.8 percent of cases.[78] DHS combines these initial and re-verification burdens to estimate 9.6 minutes or 0.16 hours (7.68 mins + (3.6 mins x 0.548)) per employee. The number of new hires per employer (55),[79] multiplied by the number of employers (total calculation based on Table 14), hours per new hire case, and fully loaded hourly wage of a human resources specialist ($43.93),[80] results in the total cost of the verifications of employees.

[75]Paperwork Reduction Act (PRA) Supporting Statement for E-Verify Program (OMB No. 1615-0092). The Supporting Statement was posted on www.regulations.gov with Docket ID: USCIS-2007-0023, posted on June 6, 2015 with document ID number: USCIS-2007-0023-0048. Available under "Supporting Materials" from the following address: http://www.regulations.gov/#!docketDetail;D=USCIS-2007-0023 Page 13 of the Supporting Statement describes calculation of response times.

[76] Note that the response time in the June 6, 2015 E-Verify Supporting Statement is the weighted average of the time required for the initial query, the time required to assist an employee with the Tentative Non-Confirmation (TNC) contestation process when necessary, and the time required to assist an employee with the Final Non-Confirmation (FNC) contestation process when necessary. The weighted average was calculated as follows: {(98.8% (percent of Cases resolved without TNC) * .12 (time, in hours, to submit the initial query)} + {(1.03% (percent of Cases that receive a TNC) * 0.5 (time, in hours, spent assisting employee with the TNC contestation process)} + {(0.02% (percent of Cases that result in an FNC contestation) * 1.0 (time, in hours, spent assisting employee with the FNC contestation process)} = .128 (7.68 minutes) per query. Page 13

[77] Based on the June 6, 2015 E-Verify Supporting Statement, please note that the response time is the weighted average of the time required for the initial query and the time required to assist an employee with the Tentative Non-Confirmation (TNC) contestation process when necessary. The weighted average was calculated as follows: {98.8% (percent of Cases resolved without TNC) * 0.05 (time, in hours, to submit the query)} + {1.2% (percent of Cases that receive a TNC) * 0.62 (time, in hours, spent assisting employee with the TNC contestation process)} = 0.06 hours (3.6 minutes) per query. Page 13.

[78]The June 6, 2015 E-Verify PRA supporting statement describes 232,900 re-verifications and 425,000 total initial verifications, resulting in 0.548 = 232900/425000. Page 12.

[79] Paperwork Reduction Act (PRA) Supporting Statement for E-Verify Program (OMB No. 1615-0092). The Supporting Statement was posted on www.regulations.gov with Docket ID: USCIS-2007-0023, posted on June 6, 2015 with document ID number: USCIS-2007-0023-0048. Available under "Supporting Materials" from the following address: http://www.regulations.gov/#!docketDetail;D=USCIS-2007-0023. Page 12 of the Supporting Statement describes the number of responses per respondent.

[80]See footnote 52.

Table 15: E-Verify Case Verifications Costs ($ millions)

Year	Total Employers (Affected by the Rule)	Number of Cases (Employers x 55 New Hires per Employer)	Opportunity Cost (New Cases x 0.16 hrs x $43.93)/ 1,000,000
1	5,078	279,270	$2.0
2	6,042	332,336	$2.3
3	7,190	395,465	$2.8
4	8,557	470,622	$3.3
5	10,182	560,021	$3.9
6	12,117	666,433	$4.7
7	14,419	793,041	$5.6
8	17,159	943,743	$6.6
9	20,419	1,123,025	$7.9
10	24,299	1,336,441	$9.4
Total			**$48.5**

*Estimates may not total due to rounding.

Initial Enrollment and Setup, Ongoing Training, and Maintenance Costs

Employers that will newly enroll in E-Verify will have an enrollment time burden that includes review and signing of the MOU, registration, new user training, and review of the user guides. DHS estimates that enrollment time burden to be 2.26 hours, and multiplies this time by the fully loaded hourly wage rate of the appropriate official with signatory authority ($80.12) to estimate the time burden enrollment costs. Additionally, DHS estimates an initial $100 in setup costs[81] to use E-Verify.[82] DHS assumes that 21.7 percent of new employers would incur a setup cost, while the remaining would not incur a setup cost.

Employers using E-Verify on an ongoing basis would take training each year on new features and system updates, which DHS estimates to take an hour per year. DHS estimates that

[81]Findings of the E-Verify User Survey, April 30, 2014, The median start-up costs such as software upgrade, "Among current and prior E-Verify users that incurred setup costs for E-Verify, the overall median cost was $100 in 2013, the same as the median setup cost reported in 2008 and 2010". http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/Everify%20Studies/E-Verify_User_Survey_Report_April2014.pdf.

[82]According to the April 2014 Findings of the E-Verify User Survey Report, 21.7 percent of employers surveyed indicated that direct set-up costs were a burden.

a human resources specialist at a fully loaded hourly wage rate of $43.93 would take the training. Employers using E-Verify would also incur computer maintenance costs of $398 per employer.[83] DHS assumes that 18.6 percent of employers would incur maintenance costs.[84] Table 16 displays initial enrollment and setup costs and multiplies the number of employers newly enrolling by the respective enrollment costs and the number of employers with setup costs by the setup cost per employer. Table 17 displays the annual training and maintenance costs and multiplies the total number of employers that are new and would be burdened by a mandated requirement by the training cost and multiplies the number of these employers that would have an annual maintenance cost by the maintenance cost per employer. Table 18 displays the total E-Verify costs.

Table 16: E-Verify New Employer Enrollment & Setup Costs ($ millions)

Year	New Employers Enrolling	New Employer Enrollment Costs (New Employers x $80.12 x 2.26)/ 1,000,000	New Employers Enrolling in E-Verify Incurring Setup Costs (New Employers x 0.217)	New Employer Setup Costs (Number of Employer w Setup Costs x $100)/1,000,000	Total Enrollment & Setup Costs
1	2,244	$0.4	487	$0.0	$0.5
2	2,670	$0.5	579	$0.1	$0.5
3	3,177	$0.6	689	$0.1	$0.6
4	3,781	$0.7	820	$0.1	$0.8
5	4,499	$0.8	976	$0.1	$0.9
6	5,354	$1.0	1,162	$0.1	$1.1
7	6,371	$1.2	1,383	$0.1	$1.3
8	7,582	$1.4	1,645	$0.2	$1.5
9	9,022	$1.6	1,958	$0.2	$1.8
10	10,737	$1.9	2,330	$0.2	$2.2
Total					**$11.2**

*Estimates may not total due to rounding.

[83] Findings of the E-Verify User Survey 2014, The median start-up costs such as software upgrade, for employers not mandated to use E-Verify, was $398. http://www.uscis.gov/sites/default/files/USCIS/Verification/E-Verify/E-Verify_Native_Documents/Everify%20Studies/E-Verify_User_Survey_Report_April2014.pdf.

[84] According to the Findings of the E-Verify User Survey, 18.6 of employers reported a burden for maintenance costs.

Table 17: E-Verify All Employer Updated Training & Maintenance Costs ($ millions)

Year	Total Employers (Affected by the Rule)	Ongoing Annual Training Costs (Total Employers x (1 hrs x $43.93)/ 1,000,000	Total Employers with Maintenance Costs (Total Employers x 0.186)	Total Employers Ongoing Maintenance Costs (Total Employers with Main Costs x $398)/ 1,000,000	Total Training and Maintenance Costs
1	5,078	$0.2	944	$0.4	$0.6
2	6,042	$0.3	1,124	$0.4	$0.7
3	7,190	$0.3	1,337	$0.5	$0.8
4	8,557	$0.4	1,592	$0.6	$1.0
5	10,182	$0.4	1,894	$0.8	$1.2
6	12,117	$0.5	2,254	$0.9	$1.4
7	14,419	$0.6	2,682	$1.1	$1.7
8	17,159	$0.8	3,192	$1.3	$2.0
9	20,419	$0.9	3,798	$1.5	$2.4
10	24,299	$1.1	4,520	$1.8	$2.9
Total	125,462	**$5.5**	23,337	**$9.3**	**$14.8**

*Estimates may not total due to rounding.

Table 18: E-Verify Total Costs ($ millions)

Total Enrollment & Setup Costs	Total Training and Maintenance Costs	Verifications Costs	Total Enrollment & Training Costs
$0.5	$0.6	$2.0	**$3.0**
$0.5	$0.7	$2.3	**$3.6**
$0.6	$0.8	$2.8	**$4.3**
$0.8	$1.0	$3.3	**$5.1**
$0.9	$1.2	$3.9	**$6.0**
$1.1	$1.4	$4.7	**$7.2**
$1.3	$1.7	$5.6	**$8.6**
$1.5	$2.0	$6.6	**$10.2**
$1.8	$2.4	$7.9	**$12.1**
$2.2	$2.9	$9.4	**$14.4**
$11.2	**$14.8**	**$48.5**	**$74.5**

*Estimates may not total due to rounding.

Additional Length of Filing Time between new Form I-20 for STEM OPT Extension and Form I-765

DHS proposes to change, under 8 CFR 214.2(f)(11)(i)(C), the length of time a student has between receiving DSO approval for the STEM OPT extension via a new Form I-20 and when the student must properly file his or her Form I-765 with USCIS. The current period provides the student 30 days and the proposed change would provide students with 60 days. There is no cost associated with this change.

Unaccredited Schools

DHS proposes placing prohibitions on participation in the STEM OPT extension by students from schools that are not accredited by an accrediting agency recognized by the Department of Education. However, as mentioned previously, DHS expects less than one percent of students would be denied eligibility for the STEM OPT extension under the proposed rule.

The proposed accreditation requirements could result in a variety of responses by schools and students. Prohibiting unaccredited schools from allowing students to participate in the STEM OPT extension may deter foreign students from applying and enrolling in these schools, thereby negatively affecting revenue. It may result in some unaccredited schools seeking such accreditation, and thus incurring associated costs, in order not to lose potential students.

During the period from 2010 to 2014, a total of 1,129 schools recommended students for the STEM OPT extension. Of those, only seven schools continue to be SEVP-certified in 2015 yet do not meet the proposed accreditation requirement. Of these seven unaccredited schools, four have recommended on average less than one student per year in the past five years, two

have recommended between five and ten students on average per year, and one has recommended an average of 77 per year.

Schools most likely to be impacted by this provision in the proposed rule are the few that enroll a large number of F-1 students in relation to the total size of their student body and have a high rate of participation in STEM OPT. These schools may choose to seek accreditation, which can cost thousands of dollars annually, or may potentially lose future foreign students and associated revenue. DHS requests comment from unaccredited institutions on this provision, including the potential effect of the requirement on the school and any data associated with the impact, such as the cost of accreditation or potential revenue loss.

Prohibiting unaccredited schools from allowing students to participate in the STEM OPT extension also removes opportunities for the students at these schools. Future F-1 students (not yet enrolled in a school) wishing to participate in the STEM OPT extension program could choose not to apply or attend a school that could not meet the eligibility requirements for a student to obtain a STEM OPT extension. This analysis assumes that if the proposed rule is finalized, students who will have already obtained STEM OPT extensions when the rule becomes effective will be able to complete their STEM OPT extensions. However, students enrolled in schools that would no longer be able to offer the program but who will not yet have obtained STEM OPT extensions would have to either not participate in the program or transfer to a different school. Transferring schools, should a student choose to take such action, would raise a separate burden of having to reapply for OPT because of the regulatory requirement that OPT employment is automatically terminated when the student transfers to another school.[85] Again, DHS estimates that 0.56 percent of students who would have participated in the STEM OPT

[85] See 8 CFR 214.2(f)(10)(ii)(B).

program would be affected by this provision. If students choose not to transfer, they would forgo the benefits of the skills learned during a STEM OPT extension period. If students choose to transfer, they would incur costs of applying to another school, any other associated costs for the change (such as application or transcript fees), and the costs of going through the OPT application process again. DHS does not include an estimate of the number of students who may choose to transfer.

Protections for U.S. Workers

The proposed rule removes the opportunity for students to complete their STEM OPT extension as volunteers by requiring compensation that is commensurate with that paid to similarly situated U.S. workers and that complies with appropriate labor laws. DHS does not have data on the number of STEM OPT students who do not currently receive compensation. In addition, DHS does not have data on the number of STEM OPT students who do not currently receive wages that would be considered permissible under the proposed rule. DHS notes that employer participation in the STEM OPT program is entirely voluntary, and each employer would determine if the benefits of hiring STEM OPT students continues to exceed the cost of doing so when considering all of the costs and burdens of the proposed rule, including the requirement to pay commensurate compensation. To the extent that employers are not currently paying STEM OPT participants wages, or wages that would be commensurate in accordance with the proposed rule, the proposed requirements would be an additional cost to these employers.

The proposed rule also requires the employer to attest that it will not terminate, lay off, or furlough any full- or part-time, temporary or permanent U.S. workers as a result of providing the STEM OPT to the student. As noted previously, the proposed rule may increase the number of

students who can participate in the STEM OPT program by approximately 32,754 in the first year, resulting in an increase in the number of people working in the United States. As the size of the U.S. workforce is approximately 156 million,[86] the STEM OPT population constitutes a fraction of a percent (0.021 percent) of the overall U.S. civilian workforce. Additionally, when considering the national total estimated STEM employment population of 17 million workers,[87] the STEM OPT population would constitute 0.19 percent. However, DHS includes this non-displacement attestation to minimize any unintended consequences of the proposed rule on the U.S. labor market.

These requirements, in effect, likely decrease the number of employers that may be willing to accept nonimmigrant students on STEM OPT extensions. Students may thus have a more difficult time finding employers to provide them with training opportunities. DHS requests comments from students and employers on the effect of these proposed requirements.

Other Unquantified Costs

The proposed rule also places more burdens and restrictions on the practical training opportunities eligible under the newly proposed requirements of the STEM OPT program. For example, the proposed rule requires employers to agree to take active responsibility for the student's training and ensure that skill enhancement of the student's degree is the primary goal. These requirements too likely decrease the number of participating employers and thus opportunities for STEM OPT students.

[86] Bureau of Labor Statistics, Local Area Unemployment Statistics, Regional and State Unemployment – 2014 Annual Averages, Table 1 "Employment status of the civilian non-institutional population 16 years of age and over by region, division, and state, 2013-14 annual averages" (March 4, 2015). Available at: http://www.bls.gov/news.release/archives/srgune_03042015.pdf

[87] See footnote 44, for BLS list of STEM occupation and employments for STEM Occupations.

Government Costs

The requirements of this rule on DHS are funded primarily by fees collected from persons requesting these benefits. Therefore, DHS does not quantify an additional outlay of DHS funds.

Total Costs

The table below presents the distribution of costs for students, DSOs, and employers for the proposed rule's requirements for each STEM practical training extension opportunity as well as the total E-Verify costs per employer.

Table 19: Summary Distribution of Costs

	STEM OPT & E-Verify Costs	
Students (Per OPT Ext)	Eligible for STEM OPT Ext (Student on 24 mth ext)	$775
DSOs (Per OPT Ext)	Eligible for STEM OPT Ext (Student on 24 mth ext)	$85
Employers (Per OPT Ext) + (Total E-Verify per Employer)	STEM-OPT Employer (w E-Verify) (Student on 24 mth ext)	$1,047
	New to STEM-OPT (New to E-Verify) (Student on 24 mth ext)	$1,328

The total public cost for changes to the STEM OPT programs under this proposed rule is comprised of initial approval of the Mentoring and Training Plan form, six-month evaluations and validation check-ins, periodic information reporting, Form I-765 costs, and E-Verify costs. The tables below display these costs.

Table 20: STEM OPT – Total Cost ($ millions)

Year	Mentoring and Training Plan Initial Submission	6 Month Evaluations + Validation Check-Ins	Periodic Reports to DSO	Form I-765	Total STEM OPT Costs
1	$10.6	$13.8	$1.3	$27.6	$53.3
2	$7.8	$11.5	$0.9	$20.4	$40.7
3	$9.0	$13.3	$1.1	$23.5	$46.8
4	$10.4	$15.3	$1.3	$27.0	$53.9
5	$11.9	$17.5	$1.4	$31.0	$61.9
6	$13.2	$19.5	$1.6	$34.4	$68.7
7	$14.7	$21.6	$1.8	$38.2	$76.3
8	$16.3	$24.0	$2.0	$42.4	$84.7
9	$18.1	$26.6	$2.2	$47.1	$94.0
10	$20.1	$29.6	$2.4	$52.3	$104.3
Total	**$132.1**	**$192.7**	**$16.0**	**$343.9**	**$684.8**
Total (7%)	$88.0	$127.9	$10.6	$229.1	$455.7
Total (3%)	$110.1	$160.4	$13.3	$286.6	$570.4
Annual (7%)	$12.5	$18.2	$1.5	$32.6	$64.9
Annual (3%)	$12.9	$18.8	$1.6	$33.6	$66.9

*Estimates may not total due to rounding.

Table 21: E-Verify– Total Cost ($ millions)

Year	Total Enrollment & Setup Costs	Total Training and Maintenance Costs	Verifications Costs	Total Enrollment & Training Costs
1	$0.5	$0.6	$2.0	**$3.0**
2	$0.5	$0.7	$2.3	**$3.6**
3	$0.6	$0.8	$2.8	**$4.3**
4	$0.8	$1.0	$3.3	**$5.1**
5	$0.9	$1.2	$3.9	**$6.0**
6	$1.1	$1.4	$4.7	**$7.2**
7	$1.3	$1.7	$5.6	**$8.6**
8	$1.5	$2.0	$6.6	**$10.2**
9	$1.8	$2.4	$7.9	**$12.1**
10	$2.2	$2.9	$9.4	**$14.4**
Total	**$11.2**	**$14.8**	**$48.5**	**$74.5**
Total (7%)	$7.2	$9.5	$31.0	$47.6
Total (3%)	$9.2	$12.1	$39.7	$61.0
Annual (7%)	$1.0	$1.4	$4.4	$6.8
Annual (3%)	$1.1	$1.4	$4.7	$7.2

*Estimates may not total due to rounding.

Table 22: Total Cost ($ millions)

Year	STEM OPT	E-Verify	Total		
			Low	Primary	High[88]
1	$53.3	$3.0	$57.0	**$56.3**	$63.6
2	$40.7	$3.6	$43.3	**$44.3**	**$53.3**
3	$46.8	$4.3	$48.4	**$51.1**	**$61.7**
4	$53.9	$5.1	$54.0	**$58.9**	**$71.4**
5	$61.9	$6.0	$60.4	**$68.0**	**$82.7**
6	$68.7	$7.2	$67.5	**$75.9**	**$95.8**
7	$76.3	$8.6	$75.5	**$84.9**	**$110.9**
8	$84.7	$10.2	$84.5	**$94.9**	**$128.5**
9	$94.0	$12.1	$94.6	**$106.1**	**$149.0**
10	$104.3	$14.4	$106.0	**$118.8**	**$172.7**
Total	**$684.8**	**$74.5**	**$691.0**	**$759.3**	**$989.5**
Total (7%)	$455.7	$47.6	$461.3	**$503.3**	**$646.3**
Total (3%)	$570.4	$61.0	$576.4	**$631.5**	**$817.7**
Annual (7%)	$64.9	$6.8	$65.7	**$71.7**	**$92.0**
Annual (3%)	$66.9	$7.2	$67.6	**$74.0**	**$95.9**

*Estimates may not total due to rounding.

A majority of variation in cost estimates results from the uncertainty in the number of students who would take advantage of the STEM OPT extension in the future. For example, there could be variations in the growth rate of F-1 students. Additionally, changing the length of the extension could alter the assumed participation rate of eligible students. To help better determine the burden of the proposed requirements and the overall cost of the proposed rule, DHS requests comments from schools, students and employers of STEM OPT students on the estimates and assumptions contained in this analysis.

6. Benefits

Through this rulemaking, DHS proposes to amend its STEM OPT program regulations by extending the STEM OPT extension period for a given education level; expanding the degrees

[88] DHS estimates the high cost if the assumption that 76 percent of employers that previously enrolled and used E-Verify did not continue to use the program voluntarily. All other assumptions, unit costs and methodology for calculations were held constant.

eligible for the STEM OPT extension; establishing a general definition for STEM fields of study and setting forth a process for public notification when DHS updates the STEM list; requiring a formal mentoring and training program by employers; incorporating a school accreditation requirement; and implementing new measures to ensure that STEM OPT is consistent with U.S. labor market protections to safeguard the interests of U.S. workers in related fields.

Longer period of stay and expanding the degrees eligible for STEM OPT extension

The 2008 IFR allowed students who received a STEM degree to be eligible for an additional 17 months of OPT, for a total of 29 months. The proposed rule would lengthen this extension period to 24 months. It would also expand the number of students eligible to use the extension by removing the once-in-a-lifetime cap on the STEM OPT extension to allow eligibility for a second extension for students attaining another STEM degree at a higher degree level. It would also, while difficult to judge with certainty in the proposed, likely expand the number of students eligible to use the extension by allowing students to base their eligibility on a prior STEM degree and through potential changes to the STEM Designated Degree Program list.

Opening the extension to more students and extending the current 17-month extension would allow students more time to further their full course of study in the United States by gaining valuable on-the-job training in their field from employers. Current research also shows that international students contribute to the overall economy by building global connections between their hometowns and U.S. host cities.[89] Evidence links skilled migration to transnational business creation, trade, and direct investment between the United States and a

[89] Brookings Institution, "The Geography of Foreign Students in U.S. Higher Education: Origins and Destinations" (August 29, 2014), available at http://www.brookings.edu/research/interactives/2014/geography-of-foreign-students#/M10420.

migrant's country of origin.[90] Finally, the proposal would improve the U.S. competitive position by making U.S. colleges and universities more attractive to students world-wide and by allowing more foreign students a longer period to acquire skills and knowledge often unavailable in their home countries. The Association of International Educators (NAFSA) estimates that during the 2013-2014 academic year the more than 850,000 international students and their families at universities and colleges across the country supported 340,000 jobs and contributed $26.9 billion to the U.S. economy.[91] Thus, continuing to make U.S. colleges and universities more attractive by temporarily retaining talented STEM students with desirable skills in these growing fields improves the U.S. competitive position.

Definition for STEM fields and process for DHS updates to list

The proposed rule establishes a general definition for STEM fields of study and sets forth a process for public notification when DHS updates the STEM list. A definition would provide a clear scope for future changes and additions to the STEM Designated Degree Program list. Both by defining a scope for the definition of STEM and by proposing that DHS may notify the public of any changes to the list through a notice in the Federal Register, DHS will increase the transparency of the process through which updates occur and ensure that stakeholders have notice of such a change. The proposed changes continue to allow for DHS to make changes to the STEM Designated Degree Program list, such as a broadening of the list, thereby expanding the potential for emerging and additional degrees that could enable students to qualify for the

[90] Sonia Plaza, Diaspora resources and policies, in International Handbook on the Economics of Migration, 505-529 (Amelie F. Constant and Klaus F. Zimmermann, eds., 2013).
[91] NAFSA: Association of International Educators, The International Student Economic Value Tool, 2013-2014 Academic Year. Available at: http://www.nafsa.org/_/File/_/eis2014/USA.pdf

extension. As is the current process, DHS would continue to accept suggestions at SEVP@ice.dhs.gov.[92]

Allowing extensions only to students with degrees from accredited schools

The proposed rule would allow only students who have received a degree from, or are pursuing a degree with, an educational institution accredited by an accrediting agency recognized by the Department of Education to be eligible for the STEM OPT extension. Accredited schools have an additional level of scrutiny, oversight, and accountability for following through with their stated educational objectives. Accreditation thus decreases the opportunities and likelihood for less scrupulous schools, DSOs, or students to abuse the STEM OPT extension.

ICE has withdrawn SEVP certification from several schools for using false statements and misrepresentations to DHS to procure immigration benefits for students, including immigration status and OPT. Two instances that received considerable media attention concerned Tri-Valley University and the University of Northern Virginia. Neither of these schools was accredited by a Department of Education-recognized accrediting agency. In addition, ICE has ongoing investigations into a number of other unaccredited schools.

DHS believes that prohibiting unaccredited schools from participating in these programs would reduce the types of abuse of the F-1 visa classification's benefits displayed by Tri-Valley and University of Northern Virginia. DHS further believes that prohibiting unaccredited schools from participating in the STEM OPT extension program would reduce the establishment of schools solely to exploit practical training programs and ensure that schools are lawfully using the F-1 visa program, thereby strengthening the security of practical training.

[92] ICE Policy Guidance, 1004-03 Update to Optional Practical Training, page 7. Available at http://www.ice.gov/doclib/sevis/pdf/opt_policy_guidance_042010.pdf

Mentoring and training program

The proposed rule would require incorporation of a formal mentoring and training program into the STEM OPT extension. A formal mentoring and training plan requirement has several benefits. It creates stronger ties to degree-granting institutions to better ensure that a student's practical training furthers the student's full course of study in the United States, that skill enhancement is the primary goal of practical training, and that the student is developing professional skills. As part of the mentoring and training program, students would be required to provide DSOs with an evaluation of their practical training every six months. This evaluation would provide students a formal opportunity to discuss progress and re-evaluate goals with employers as well as provide DSOs an opportunity to see the student's development through the practical training opportunity. Similar to an employee performance appraisal, the six-month evaluation can be a tool to keep the student's time with the employer focused and productive towards established goals as well as inspire the student to aim for new heights in skills and performance. Having such a program may also help to reduce the potential that employers would fail to provide students with adequate learning experience. Thus, DHS believes that having Mentoring and Training Plans and associated evaluations would strengthen the accountability and effectiveness of STEM OPT extensions.

Labor market protections

The proposed rule would require employers to certify, among other assurances, that the employer is not displacing a U.S. worker by hiring a STEM OPT participant. It also requires employers to pay STEM OPT students commensurate compensation and report those wages through the Mentoring and Training Plan. The certification and wage requirements are steps to ensure that the STEM OPT extension has no unintended consequences for the U.S. labor market.

Compliance Mechanisms

The proposed rule would make clear that ICE, at its discretion, may conduct a site visit of an employer. The ability for ICE to conduct an employer on-site review would provide incentive for employers to not engage in fraudulent use of F-1 nonimmigrant students and a means for ICE to investigate any reports of such fraudulent use.

DHS also proposes that a DSO be prohibited from recommending a student for a STEM OPT extension if the employer has not provided the assurances required by this rule or is otherwise not in compliance with the relevant reporting, evaluation and other requirements described in the proposed rule. This requirement would serve as a mechanism to further provide oversight of employers in complying with the STEM OPT extension reporting, evaluation, and other requirements and assurances described in this rule.

Additional Length of Filing Time between new Form I-20 for STEM OPT Extension and Form I-765

DHS proposes to change, under 8 CFR 214.2(f)(11)(i)(C), the length of time a student has between receiving DSO approval for the STEM OPT extension via a new Form I-20 and when the student must properly file his or her Form I-765 with USCIS. The current period provides the student 30 days, and the proposed change would provide students with 60 days. This would reduce the number of denials issued by USCIS for an expired Form I-20, the number of data corrections needed in SEVIS, and potentially the number of students that may ask DSOs for an updated Form I-20 to replace one that has expired.

7. Alternatives Considered

DHS considered three options to meet the objectives of the proposed rule. The below discussion and analysis presents a discussion and cost analysis of the options considered. A

summary of these options, their costs and benefits, as well as a discussion of the rationale for the agency's decision, are included at the end.

Alternative 1 – No Change

The first alternative would be to take no regulatory action, in which case OPT students would no longer be allowed to work or reside in the United States past their 12 month post-completion OPT period, unless they were able to convert to another employment-authorized visa classification or complete another academic program that would afford OPT. DHS believes the benefits that accrue from allowing the F-1 STEM-OPT extension for students and educational institutions would not be realized under this alternative and that in many cases these students would have to leave the United States. This would deter future foreign students who would pursue STEM degrees from applying to U.S. educational institutions, and reduce the attractiveness of U.S. educational institutions compared to other foreign educational systems that have more flexible student work programs.

Alternative 2 – Proposed Alternative

The second, and proposed, option would reinstate the 2008 IFR with the following improvements: allow a STEM-OPT extension for 24 months for an initial degree, and allow a second extension for up to 24 months for a second STEM degree at a higher education level; establish a program requiring employers and students to prepare Mentoring and Training Plans and to present those plans to the relevant DSOs; include domestic labor protections and commensurate compensation requirements; and maintain the 2008 IFR reporting requirements and the requirement that employers of students on the STEM OPT extension use E-Verify for all new hires. The extensions would help to ensure that the student has adequate opportunity to meet the training objectives in his or her Mentoring and Training Plan in his or her highly

specialized STEM field. The training would be required to be directly related to the student's major area of study. This program would require employers to provide certain information on the students, including: learning objectives for the employment, how those objectives would be achieved and measured, and place of employment. Under this scheme, a student seeking a STEM OPT extension would be required to complete the Mentoring and Training Plan, coordinate objectives with their employer, and present the completed form to their DSO. DSOs would be required to review submissions for the STEM OPT extension in SEVIS. DHS may require the submission of the Mentoring and Training Plan to ICE and/or USCIS.

Alternative 3 – No Change in STEM OPT Length

The third alternative would also establish a mentoring and training form requirement for STEM OPT and include all other aspects of the proposed rule, except that the maximum length of the STEM OPT extension would be 17 months. Therefore, the granted STEM OPT extension, for anyone who would qualify eligible under the criteria under the rule as proposed would in this scenario remain at 17 months, consistent with the extension period under the 2008 IFR. For students seeking a STEM OPT extension due to a second or prior STEM degree, the alternative would be similar to alternative two, except in the provision of a 17-month OPT period.

To estimate the total cost of this third alternative, DHS begins with the estimated cost for many of the provisions of the proposed alternative. Specifically, students would still incur opportunity costs of $58.05 for initial completion of the form; the appropriate employer official with signatory authority and the student's supervisor would still incur costs of $40.06 and $39.48, respectively, for initial completion; and DSOs would still incur costs of $13.09 for initial approval and recordkeeping. DHS also includes an estimated 10 percent implementation cost for DSOs and employers. In total, DHS estimates a total cost of $159.94 for initial completion per

student form. DHS includes all STEM OPT populations proposed under the proposed alternative here as well, which includes eligibility based upon a prior degree, a second qualifying degree, and a broadened CIP list. These populations would also incur the initial completion of the form costs.

In addition, students and employers would incur opportunity costs for filling out and approving the proposed evaluations every six months. As discussed under the proposed alternative, DHS estimates each evaluation would require one hour and ten minutes of a student's time and 0.25 hour of a supervisor's time. However, with only a 17-month extension, there would only be three evaluations—two interim evaluations completed at months six and twelve, as well as a final evaluation at 17 months. DHS estimates $122.01 (3 evaluations × 1.17 hrs × $34.76 per hour) to account for the student's time and $59.22 (3 evaluations × 0.25 hrs × $78.96) for the supervisor's time.

Additionally, the DSO would incur an opportunity cost of time to review these evaluations. For students eligible for an extension under the original program, DSOs would only incur an incremental cost of an additional 20 minutes per validation check-in to look over the six-month evaluation and student information. The cost to DSOs for the three check-ins is $39.29 (3 check-ins × 0.333 hrs × $39.33 per hr). Finally, DHS also includes an estimated 10 percent implementation cost for DSOs and employers. The table below summarizes the costs described above. The subsequent table applies these costs to the estimated total number of students annually under each category.

Table 23: No Change in STEM OPT Length Alternative – Summary of Costs per Mentoring and Training Plan

Require-ment	**Popula-tion**	**Student** ($34.76 per hr)	**Person with Signatory Authority** ($80.12 per hr)	**Supervisor** ($78.96 per hr)	**HR Specialist ($43.93 per hr)**	**DSO** ($39.33 per hr)	**Implemen-tation** (10% of school and employer costs)	**Total**
Initially Completing Form	All	**$58.05** (1.67 hrs x $34.76)	**$40.06** (0.5 hrs x $80.12)	**$39.48** (0.5 hrs x $78.96)	**$43.93** (1 hrs x $43.93)	**$13.09** ((0.25 hrs + 0.083 hrs) x $39.33)	**$13.66** (($40.06 + $39.48 + $13.09) x 10%)	**$208.27**
3 Evaluations & Validation Check-Ins	Original STEM OPT Extension-Eligible Students	**$122.01** (1.17 hr x 3 Evals x $34.76)		**$59.22** (0.25 hrs x 3 Evals x $78.96)		**$39.29** (0.333 hrs x 3 Evals x $39.33)	**$9.85** (($59.22 + $39.29) x 10%)	**$229.99**

Table 24: No Change in STEM OPT Length Alternative – Total Cost for Mentoring and Training Plan ($ millions)

Year	**STEM OPT 17 mth Extension Students**	**Initially Completing Mentoring and Training Plan Form** ((OPT 17-mo Students + OPT Newly Eligible Students) x $208.27)	**3 Evaluations and Validation Check-Ins** ((OPT 17-mo Students x $229.99)	**Total**
1	32,754	$6.8	$7.5	$14.4
2	37,656	$7.8	$8.6	$16.4
3	43,291	$9.0	$9.9	$18.9
4	49,771	$10.4	$11.4	$21.7
5	57,221	$11.9	$13.1	$25.0
6	63,515	$13.2	$14.5	$27.7
7	70,502	$14.7	$16.1	$30.8
8	78,257	$16.3	$17.9	$34.2
9	86,866	$18.1	$19.8	$37.9
10	96,421	$20.1	$22.0	$42.1
Total				$269.1

*Estimates may not total due to rounding.

Under this alternative, newly eligible students would also incur other incremental costs associated with becoming eligible for the extension for the first time. These costs are described under the proposed alternative and are not duplicated here but are included in the total estimated cost for this alternative. The 17-month extension would result in fewer periodic reports, and costs reflect the number of reports per student for 17 months instead of 24 months. The following costs for period information reporting reflect 1.346 per student.[93]

Table 25: No Change in STEM OPT Length Alternative – Total Cost ($ millions)

Year	STEM OPT				E-Verify	Total
	Initially Completing Form	3 Evaluations & Validation Check-Ins	Cost for for Form I-765	Periodic Information Reporting		
1	$6.8	$7.5	$17.8	$0.6	$3.0	$35.7
2	$7.8	$8.6	$20.4	$0.7	$3.6	$41.1
3	$9.0	$9.9	$23.5	$0.9	$4.3	$47.5
4	$10.4	$11.4	$27.0	$0.7	$5.1	$54.4
5	$11.9	$13.1	$31.0	$0.8	$6.0	$62.9
6	$13.2	$14.5	$34.4	$0.6	$7.2	$69.9
7	$14.7	$16.1	$38.2	$0.6	$8.6	$78.2
8	$16.3	$17.9	$42.4	$0.7	$10.2	$87.5
9	$18.1	$19.8	$47.1	$0.8	$12.1	$97.9
10	$20.1	$22.0	$52.3	$0.9	$14.4	$109.7
Total	**$128.3**	**$140.8**	**$334.0**	**$7.1**	**$74.5**	**$684.8**
Total (7%)	$84.5	$92.7	$219.9	$5.0	$47.6	$449.6
Total (3%)	$106.4	$116.8	$277.0	$6.1	$61.0	$567.3
Annual (7%)	$12.0	$13.2	$31.3	$0.7	$6.8	$64.0
Annual (3%)	$12.5	$13.7	$32.5	$0.7	$7.2	$66.5

*Estimates may not total due to rounding.

[93] See footnote 64.

8. Conclusion

In this analysis, DHS looks at alternatives that would fulfill the goals of the proposed rule. DHS describes the cost of these alternatives in detail previously. The results of this comparison of alternatives are summarized in the table below.

Table 26: Summary of Total Costs for Regulatory Alternatives Considered ($ millions)

Year	1 No Action	2 Proposed Rule	3 No Change in STEM OPT Length
1	$0.0	$56.3	$35.7
2	$0.0	$44.3	$41.1
3	$0.0	$51.1	$47.5
4	$0.0	$58.9	$54.4
5	$0.0	$68.0	$62.9
6	$0.0	$75.9	$69.9
7	$0.0	$84.9	$78.2
8	$0.0	$94.9	$87.5
9	$0.0	$106.1	$97.9
10	$0.0	$118.8	$109.7
Total	**$0.0**	**$759.3**	**$684.8**
Total (7%)	$0.0	$503.3	$449.6
Total (3%)	$0.0	$631.5	$567.3

*Estimates may not total due to rounding.

DHS rejected the no action alternative and chose to take regulatory action for a few reasons. DHS seeks to enhance the academic benefit of the STEM OPT extension, and regulatory action would enable such changes. Regulatory action would strengthen the STEM OPT extension through increased oversight and more rigorous requirements for participation.

The ten-year total of the third alternative is $53.7 million less than the proposed alternative, discounted at 7 percent. This alternative would adopt the requirements of the proposed rule but without a change in the length of the STEM OPT extension. After evaluation of DHS's experience with the STEM OPT extension, DHS has rejected this alternative so as to

ensure that the practical training opportunity is long enough to complement the student's academic experience and allow for a meaningful educational experience, particularly given the complex nature of STEM projects.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 (RFA), 5 U.S.C. 601-612, as amended by the Small Business Regulatory Enforcement Fairness Act of 1996, Public Law 104-121 (March 29,1996), requires Federal agencies to consider the potential impact of regulations on small entities during the development of their rules. The term "small entities" comprises small business, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and small governmental jurisdictions with populations of less than 50,000.

1. Initial Regulatory Flexibility Analysis

DHS is publishing this initial regulatory flexibility analysis (IRFA) to aid the public in commenting on the small entity impact of the proposed recognition requirements. In particular, DHS requests information and data that would assist with better understanding the impact of this rule on small entities. DHS also seeks alternatives that will accomplish the objectives of this rulemaking and minimize the proposed rules' economic impact on small entities.

a. A description of the reasons why the action by the agency is being considered

The proposed rule would amend current regulations governing F-1 nonimmigrant students to allow for an extension of the OPT period for such students after completing a degree in a STEM-related field, as defined in the proposed rule. The rule would also improve the previous STEM OPT program by increasing oversight and strengthening requirements for participation. The proposed changes to the STEM OPT extension regulation are intended to

enhance the academic benefit of the STEM extension, create a formal process for updating the list of STEM degree programs that are eligible for the STEM extension, and incorporate new measures to better ensure that STEM OPT does not result in displacement of U.S. workers.

This rulemaking reflects the Department's commitment to enhancing our nation's scientific and technological competitiveness. DHS believes that evaluating, strengthening, and improving practical training would make the United States more competitive in attracting foreign students and increase the ability to retain foreign students educated in the United States.

b. A succinct statement of the objectives of, and legal basis for, the proposed rule

The rule would improve the STEM OPT extension by increasing oversight and strengthening requirements for participation. The proposed changes to the STEM OPT extension regulations are intended to enhance the academic benefit of the STEM OPT extension, create a formal process for updating the list of STEM degree programs that are eligible for the STEM extension, and incorporate new measures to better ensure that STEM OPT extensions do not result in displacement of U.S. workers. DHS objectives and legal authority for this proposed rule are further discussed in the NPRM preamble.

c. A description—and, where feasible, an estimate of the number—of small entities to which the proposed rule will apply

The proposed rule would affect SEVP-certified schools and employers of STEM OPT students. The analysis below presents the estimated number of applicable schools and employers separately. DHS uses data from 2010 through 2014, a five year period, for the purposes of this analysis.

Schools

During the period from 2010 through 2014, a total of 1,109 approved and accredited[94] schools recommended students for STEM OPT extensions.[95] DHS conducted a statistically valid sample analysis to estimate the number of schools that would be considered small entities. DHS determined a minimum sample size of 286 would be necessary to achieve a 95 percent confidence interval of +/- 5 percentage point on a population of 1,109.[96] DHS oversampled 293 schools to account for schools that would lack sufficient data to determine whether they were a small entity.

Of the 293 schools, DHS found that 149 are public and owned by State governments or other large governmental jurisdictions, and are not considered small entities. To determine whether schools impacted by the proposed rule are public or private institutions, DHS obtained information from the National Center for Education Statistics (NCES).[97] To determine whether public schools, not owned by a State government, are owned by small jurisdictions, DHS also reviewed county-level population data from the U.S. Census Bureau.[98] Of the 144 remaining schools, DHS determined whether these schools were private not-for-profits or private for-profit schools also from the available NCES data, except in the case of two schools for which DHS did not have enough information to make a determination. Four of the 144 schools were private, for-profit institutions. The Small Business Administration published guidelines on small business size standards applied by NAICS code to private, for-profit entities, but size standards are not specified for non-profit entities. Therefore, DHS has conservatively considered the 140 not-for-

[94] Accredited by a Department of Education-approved accrediting agency.
[95] ICE SEVIS data.
[96] See https://www.qualtrics.com/blog/determining-sample-size/.
[97] National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, http://nces.ed.gov/, Data obtained in July 2015.
[98] U.S. Census QuickFacts, Population Estimates for City and County, http://quickfacts.census.gov/qfd/index.html. Data retrieved July 2015.

profit schools and schools with insufficient information to be small entities. For the four private, for-profit schools, DHS used databases such as Hoovers, Reference USA, and public data sources to search for the school employee size and revenue.[99] Of the four private, for-profit schools, one had annual revenue below the SBA size standard and is a small entity, and the other three are not small entities. DHS estimated 141 (2+138+1) schools would be small entities out of the 293. DHS therefore estimated 48 percent of schools that recommended a student for STEM OPT extensions are small entities**.** The following table summarizes the outcomes.

Table 27: Outline of Research Statistics on Schools

Parameter	Quantity	Small Entities (Sample Segment)	Comments
Population—Schools	1,109	N/A	Total number of accredited schools endorsing STEM-OPT Students between 2010-2014
Minimum Sample	286	N/A	Sample size necessary to achieve confidence goals.
Over-sampling	293	N/A	Estimated sample needed to match 286 entities
Non-matched Sample Segment	2	Yes	Entities not found in online databases such as NCES, Hoovers, and Reference USA, assumed to be small entities
Matched Sample Segment Non-Profit Schools	138	Yes	Entities determined to be private not-for-profit, assumed to be small entities
Matched Sample Segment For-Profit Schools	1	Yes	Private for-profit, matched in online database with revenue lower than SBA size standard, assumed to be small entity
Matched Sample Segment For-Profit Schools	3	No	Entities determined to be private for-profit, matched in online databases with revenue exceeding SBA size standard, assumed not small entities
Matched Sample Segment Government Jurisdictions	149	No	Entities among the 293 sampled confirmed as large governmental jurisdictions.

STEM OPT Employers

During the period from 2010 through 2014, a total of 26,260 entities employed students who had obtained STEM OPT extensions.[100] DHS conducted a statistically valid sample

[99] The Reference USA website is http://www.referenceusa.com. The Hoovers website is www.hoovers.com. ICE collected data from these sources were collected in July 2015.
[100] ICE SEVIS data.

analysis to estimate the number of STEM OPT employers that would be considered small entities. DHS determined a minimum sample size of 379 would be necessary to achieve a 95 percent confidence interval of +/- 5 percentage points on this population. DHS oversampled 659 employers to account for of lack sufficient data in the sample.

Of the 659 employers, DHS was not able to retrieve sufficient data on 279, and assumed these employers are small entities. Of the remaining 380 with sufficient data, from one or more of multiple data sources such as Hoovers, Reference USA, and NCES, 357 were private, for-profit entities and not governmental jurisdictions. DHS also found that three of the sampled entities were temporary placement agencies (temporary agencies) and removed these three from the quantitative cost analysis, as DHS assumed most temporary agencies would not be able to comply with the requirements of the Mentoring and Training Plan. Of these 357 entities, 215 were small entities based on the number of employees or revenue being less than their respective SBA size standard for small entities, while the remaining exceeded their respective SBA size standard. The following table provides a summary of the top 30 NAICS codes representing 61 percent of the sampled 380 employers with sufficient data.

Table 28: Top 30 Industries of Sampled Employers

NAICS Code Labels	NAICS Description	Count of Entities with Sufficient Data	Percent of Entities (# in NAICS / 380)	SBA Size Standard
541511	Custom Computer Programming Services	37	9.7%	$25000000 Dollars
443142	Camera & Photographic Supplies Stores	24	6.3%	$7000000 Dollars
541330	Engineering Services	22	5.8%	$4500000 Dollars
926130	Government	16	4.2%	50,000 population
541512	Computer Systems Design Services	12	3.2%	$25000000 Dollars
325412	Pharmaceutical Preparation Manufacturing	9	2.4%	750 Employees
541810	Advertising Agencies	7	1.8%	$7010000 Dollars
561990	All Other Support Services	7	1.8%	$7000000 Dollars
523930	Investment Advice	7	1.8%	$7000000 Dollars
541618	Other Management Consulting Services	6	1.6%	$7000000 Dollars
339999	All Other Miscellaneous Manufacturing	6	1.6%	500 Employees
611310	Colleges, Universities & Professional Schools (Non-Government)	5	1.3%	$7000000 Dollars
541611	Administrative Management & General Management Consulting Serv.	5	1.3%	$7000000 Dollars
511210	Software Publishers	5	1.3%	$25000000 Dollars
561311	Employment Placement Agencies	5	1.3%	$7000000 Dollars
334111	Electronic Computer Manufacturing	5	1.3%	1000 Employees
541613	Marketing Consulting Services	5	1.3%	$7000000 Dollars
339112	Surgical and Medical Instrument Manufacturing	4	1.1%	500 Employees
213112	Support Activities for Oil and Gas Operations	4	1.1%	$7000000 Dollars
541614	Process, Physical Distribution & Logistics Consulting Services	4	1.1%	$7000000 Dollars
621999	All Other Miscellaneous Ambulatory Health Care Services	4	1.1%	$10000000 Dollars
517919	All Other Telecommunications	4	1.1%	$25000000 Dollars
519190	All Other Information Services	4	1.1%	$7000000 Dollars
811212	Computer and Office Machine Repair & Maintenance	4	1.1%	$25000000 Dollars
561320	Temporary Help Services	3	0.8%	$13500000 Dollars
621511	Medical Laboratories	3	0.8%	$13500000 Dollars
561110	Office Administrative Services	3	0.8%	$7000000 Dollars
524210	Insurance Agencies & Brokerages	3	0.8%	$7000000 Dollars
238910	Site Preparation Contractors	3	0.8%	$14000000 Dollars
518210	Data Processing, Hosting, & Related Services	3	0.8%	$25000000 Dollars
Total		230	60.5%	

Of the remaining 23 that were not-for-profit entities, 7 were private, not-for-profit and assumed to be small, and 16 were large governmental jurisdictions. DHS estimated 500 (279+214+7) employers would be small entities out of the 659. DHS therefore estimated 76 percent of employers of students obtaining STEM OPT extensions are small entities**.** The following table summarizes the outcomes.

Table 29: Outline of Research Statistics on Employers

Parameter	Quantity	Small Entities (Sample Segment)	Comments
Population—Employers	26,260	N/A	Total number of STEM-OPT employers between 2010-2014
Minimum Sample	379	N/A	Sample size necessary to achieve confidence goals.
Over-sampling	659	N/A	Estimated sample needed to match 379 entities
Non-matched Sample Segment	279	Yes	Entities not found in online databases, assumed to be small entities
Matched Sample Segment For-Profit	214	Yes	For-profit entities matched in online databases that did not exceed SBA size standard.
Matched Sample Segment Not-For-Profit	7	Yes	Entities confirmed as private not-for-profit.
Matched Sample Segment For-Profit	140	No	For-profit entities matched in online databases that did exceed SBA size standard.
Temporary Agencies	3	No	Quantitative impact not analyzed.
Matched Sample Segment Government Jurisdictions	16	No	Entities that are large governmental jurisdictions.

d. A description of the projected reporting, recordkeeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the types of professional skills necessary for preparation of the report or record

The proposed rule requires assurance that STEM OPT participants obtain skills, knowledge, and competencies through structured activities such as on-the-job training. It requires students to develop, with their employers, a mentoring plan by completing and signing the Mentoring and Training Plan form. When completed, students submit the Mentoring and Training Plan form to their DSOs when requesting the 24-month STEM OPT extension. The DSO must retain a copy of the form. Additionally, students would be required to update the

form every six months to include a progress report on accomplishments and skills or knowledge obtained. Employers must meet with the student and sign the six-month evaluation, and DSOs would check to ensure the evaluation has been completed and retain a copy.

Schools

Under the proposed rule, students must provide the completed Mentoring and Training Plan forms to their DSOs to request STEM OPT extensions. DHS includes an opportunity cost of time for reviewing the form to ensure its proper completion and filing the record either electronically or in a paper folder.

Schools would incur costs for providing oversight and reporting STEM OPT students' information as well as reviewing required documentation. DSOs would be required to ensure the form has been completed and signed prior to making a recommendation in SEVIS. Schools would be required to ensure that SEVP has access to student evaluations (electronic or hard copy) for a period of at least three years following the completion of each STEM practical training opportunity. The 2008 IFR previously required six-month student validation check-ins with DSOs, and this proposed rule would maintain the validation requirement. While the DSO would be in communication with the student during a six-month validation check-in, DHS proposes to add an additional requirement that DSOs would also check to ensure the six-month evaluation has been properly completed and retain a copy. The NPRM proposes to maintain the 2008 IFR requirements for periodic information reporting requirements on students, which would result in a burden for DSOs. Table 30 summarizes the school costs from the proposed rule, as described previously in the Costs section of this regulatory impact analysis.

Table 30: Schools - Cost of Compliance per STEM OPT Opportunity

Proposed Provision	Calculation of School Cost per Student	Cost in Year 1 per Student	Cost in Year 2 per Student
Initial Completion of Mentor & Train Plan	((0.25 hrs + 0.083 hrs) x $39.33)	$13.09	$0.00
6 Month Evaluations & Validation Check-Ins[1]	(0.333 hrs x 2 Evals x $39.33)	$26.20	$26.20
Additional Implementation Cost[2]	0.1 x Mentor & Train Plan Initial + Evals & Validation Check-Ins Costs	$3.93	$2.62
Student Info. Reporting Requirements	0.167 hrs x 2 rpts x $39.33	$13.14	$13.14
Total	Total	**$56.35**	**$41.95**

1 Estimated based on 12 month period costs per extension, for students on a 12-month second extension such as those with prior degrees and second degrees, only Year 1 costs were applied.
2 Mentoring and Training Plan initial costs are only in Year 1 per STEM OPT.

DHS estimates the annual impact to schools based on the school cost of compliance as a percentage of annual revenue. Second year costs account for new additional STEM OPT extension students. For the not-for-profit schools DHS multiplied the tuition per full-time first-year student with total enrollment numbers to estimate their revenue.[101] While tuition revenue may underestimate the actual school revenue, this is the best information available to DHS. It is the most significant source of income for most schools, and DHS believes it is a reasonable approach to measuring the impact of this proposed rule. Based on the results of the sampled small-entity schools with sufficient data, all had first year annual impacts less than 1 percent, with the average annual impact being 0.006 percent. All sampled small-entity schools with sufficient data had second year annual impacts of less than 1 percent, with the average annual impact being 0.005 percent. DHS acknowledges there may be additional regulatory costs[102] to

[101] U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, "Academic year prices for full-time, first-time undergraduate students", (Total enrollment, including Undergraduate and Graduate) 2014-2015, Available at http://nces.ed.gov/globallocator/
[102]Such costs could be related to training DSOs on how to comply with the requirements, program changes within the school, and time to generally review and comprehend the requirements of the regulation and make

the following quantified costs, and requests comments specifically addressing concerns on costs for entities of all sizes, including small entities.

Table 31: Schools – Annual Impact in Year 1

Revenue Impact Range	Number of Small Entities For-Profit with Data	Number of Non-Profit Entities with Data	Percent of Small Entity Schools
0% < Impact ≤ 1%	4	137	100%
1% < Impact ≤ 3%	0	0	0%
3% < Impact ≤ 5%	0	0	0%
5% < Impact ≤ 10%	0	0	0%
Above 10%	0	0	0%
Total	**141**		100%

Table 32: Schools – Annual Impact in Year 2

Revenue Impact Range	Number of Small Entities For-Profit with Data	Number of Non-Profit Entities with Data	Percent of Small Entity Schools
0% < Impact ≤ 1%	4	137	100%
1% < Impact ≤ 3%	0	0	0%
3% < Impact ≤ 5%	0	0	0%
5% < Impact ≤ 10%	0	0	0%
Above 10%	0	0	0%
Total	**141**		100%

Unaccredited Schools

Schools not accredited by a Department of Education-recognized accrediting agency may incur unquantified costs from the proposed prohibition on participation in the STEM OPT extension by students attending unaccredited schools. A few schools may choose to seek accreditation, or may potentially lose future foreign students and associated revenue. DHS

determinations on how to best implement the requirements with the least negative impact to their ongoing operations.

requests comment from unaccredited institutions on this provision, including the potential effect of the requirement on your school and any data associated with the impact, such as the cost of accreditation or potential revenue loss.

Employers

Employers would be required to provide information for certain fields, review the completed form, and attest to the certifications on the form. The proposed rule also ensures that students would be unable to complete their STEM OPT extensions as volunteers by requiring commensurate compensation, and additionally requires that students work at least 20 hours per week while on their STEM OPT extension. DHS does not have data on the number of STEM OPT students who do not currently receive compensation. In addition, DHS does not have data on the number of STEM OPT students who do not currently receive wages or other qualifying compensation that would be considered commensurate under the proposed rule. To the extent that employers are not currently compensating STEM OPT participants in accordance with the proposed rule, this proposal would create additional costs to these employers. However, DHS notes that employer participation in the STEM OPT program is entirely voluntary, and each employer would determine if the benefits of hiring the STEM OPT student exceeds the cost of doing so when considering all of the costs and burdens of the proposed rule, including the requirement to pay commensurate compensation. DHS requests comments from employers on the effect of these proposed requirements. In the quantified costs, DHS does account for the possible additional burden of reviewing the employment terms of similarly situated U.S. workers in order to compare the terms and conditions of their employment to those of the STEM OPT student's practical training opportunity.

The proposed rule indicates that ICE, at its discretion, may conduct a site visit of an employer. The employer on-site review is intended to ensure that each employer meets program requirements, including that they are complying with assurances and that they possess the ability and resources to provide structured and guided work-based learning experiences outlined in

students' Mentoring and Training Plans. Site visits would not be a requirement for each STEM OPT student employer or a regularly scheduled occurrence, but rather be performed at the discretion of DHS either randomly or when DHS determines that such an action is needed. The length and depth of such a visit would be determined on a case-by-case basis. For law enforcement reasons, DHS does not include an estimate of the basis for initiating a site visit and is unable to estimate of the number of site visits that may be conducted, and thus is unable to provide a total annual estimated cost for such potential occurrences. However, based on on-site-reviews to schools, DHS estimates that an employer on-site visit may include review of records and questions for the supervisor, and would take five hours per employer. Therefore, DHS estimates that if an employer were to receive such an on-site review, it may cost the employer approximately $394.80 (5 hours x $78.96).

DHS acknowledges there may be additional regulatory costs[103] to the following quantified costs, and requests comments specifically addressing concerns on costs for entities of all sizes, including small entities.

[103] Such costs could be related to train supervisors on how to comply with the requirements, program changes within the school, and time to generally review and comprehend the requirements of the regulation and make determinations on how to best implement the requirements with the least negative impact to their ongoing operations.

Table 33: Individual Employer - Cost of Compliance

Proposed Provision	Calculation of costs	Cost in Year 1	Cost in Year 2
Initial Completion of Mentor & Train Plan	(0.5 hrs x $80.12) + (0.5 hrs x $78.96)+ (1 hrs x $43.93)	$123.47	$0.00
6 Month Evaluations & Validation Check-Ins[1]	(0.25 hrs x 2 Evals x $78.96)	$39.48	$39.48
Additional Implementation Cost[2]	0.1 x Mentor & Train Plan Initial + Evals & Validation Check-Ins Costs	$11.90	$3.95
Employer STEM OPT Costs per Student =	Total	**$179.25**	**$43.43**
Cost per E-Verify per New Hire Case =	(0.16 hrs x $43.93)	**$7.03**	**$7.03**
E-Verify Enrollment	($80.12 x 2.26) + $100	$281.07	$0.00
E-Verify Annual Training & Maintenance Costs	(1 hrs x $43.93) + $398)	$441.93	$441.93
Compliance Site Visits	(5 hrs x $78.96)	$0.00	$394.80
E-Verify and Site Visit Employer Costs =	Total	**$723.00**	**$836.73**

DHS estimates the annual impact to employers based on the employer cost of compliance as a percentage of annual revenue. Second year costs include initial submission of Mentoring and Training Plans for new STEM OPT students who would be hired in the second year. For not-for-profit school employers without revenue data DHS multiplied the tuition per full-time first-year student with total enrollment numbers to estimate their revenue. Based on the results of the sampled small entities with sufficient data, almost all had first and second year annual impacts less than 1 percent, with the average first-year annual revenue impact being 0.13 percent and second-year annual revenue impact being 0.15 percent. Additionally, the cost impact per employer included a compliance site visit in year two; therefore, costs could be less for employers that do not receive a site visit. Employers of STEM OPT students would determine if the benefits of hiring such students exceed program requirements costs. To the extent that the benefits do not exceed costs, employers may choose not to hire STEM OPT students.

Table 34: Employers – Annual Impact in Year 1

Revenue Impact Range	Number of Small Entities For-Profit with Data	Number of Non-Profit Entities with Data	Percent of Small Entities Employers
0% < Impact ≤ 1%	211	7	99%
1% < Impact ≤ 3%	2	0	1%
3% < Impact ≤ 5%	0	0	0%
5% < Impact ≤ 10%	0	0	0%
Above 10%	0	0	0%
Total	**220**		100.0%

Table 35: Employers – Annual Impact in Year 2

Revenue Impact Range	Number of Small Entities For-Profit with Data	Number of Non-Profit Entities with Data	Percent of Small Entities Employers
0% < Impact ≤ 1%	210	7	99%
1% < Impact ≤ 3%	3	0	1%
3% < Impact ≤ 5%	0	0	0%
5% < Impact ≤ 10%	0	0	0%
Above 10%	0	0	0%
Total	**220**		100.0%

Current Employers that Do Not Continue to Participate

Due to additional employer requirements that must be met in order to receive the benefit of training STEM OPT extension opportunity, it may be possible that some employers (such as temporary employment agencies) would no longer participate in STEM OPT extensions. DHS does not present the quantitative burden or cost associated with this possible impact on employers due to lack of available information on employers that would fall under this category and the associated economic impacts. DHS will consider data or information provided by commenters to assess such an impact upon employers.

e. An identification, to the extent practicable, of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule

DHS is not aware of any Federal rules applying to F-1 nonimmigrant students that may duplicate, overlap, or conflict with the proposed rule. DHS invites any comment and information regarding any relevant rules.

f. A description of any significant alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimize any significant economic impact of the proposed rule on small entities

DHS understands that the proposed rule would place more requirements on schools and employers of STEM OPT students, of any size, than currently exist. DHS has tried to minimize, to the extent possible, the small entity economic impacts of the proposed rule by structuring the program such that students are largely responsible for meeting its requirements. This not only minimizes the burden of the proposed program on schools and employers, but also helps to ensure that students are active participants in determining the success of their practical training opportunities, and that they bear an equitable amount of responsibility as the main beneficiaries of the benefits of the practical training opportunities.

DHS has tried to minimize additional DSO responsibilities while balancing the need for oversight. For example, to the extent possible, new requirements that the rule proposes are streamlined, such as Mentoring and Training Plan evaluations that would be conducted and submitted along the same schedule as the six-month student check-ins (also known as student validation reports).

DHS has tried to provide flexibility for small entities in methods they can use to meet the commensurate duties, hours, and compensation requirements for STEM OPT students. DHS has

proposed to allow employers to perform an analysis that uses their own wage and compensation data to determine how to compensate their STEM OPT employee in a comparable manner to their similarly situated U.S. workers. This provides small entities flexibilities rather than applying a prescriptive national, state, or metropolitan data requirement. DHS also considers the small entities that may not have similarly situated U.S. workers and provides options discussed in the preamble as to how they could comply with the requirements to demonstrate commensurate compensations.

Additionally, in addition to considering all comments received on the proposed rule, DHS expects that following any final rule, DHS will engage in further stakeholder outreach activities and provide clarifying information as appropriate. DHS envisions that this outreach would reduce the burden that may result from small entities having uncertainty in how to comply with the requirements.

Employer participation in the STEM OPT program is entirely voluntary, and should an employer determine that the cost of complying with the relevant requirements is too high, the employer would be free to no longer hire F-1 students on STEM OPT extensions.

DHS welcomes comments on the conclusions identified above and alternatives that might help reduce the impact on small entities for the proposed rule. Members of the public should submit a comment, as described in this proposed rule under **Public Participation**, if they think that their business, organization, or governmental jurisdiction qualifies as a small entity and that this proposed rule would have a significant economic impact on them. It would be helpful if commenters provide DHS with as much information as possible as to why this proposed rule would create an impact on small businesses.