

Title VI-LEP Compliance Report



**California Science Center Foundation
California Science Center**

**Office of Diversity and Equal Opportunity
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Table of Contents

| | Page |
|--|-----------|
| I. Introduction | 3 |
| A. Scope | 3 |
| B. Objectives | 4 |
| C. Methodology | 4 |
| D. Program Description | 4 |
| II. Title VI Compliance Analysis | 5 |
| A. Assurances | 5 |
| B. Compliance Information | 6 |
| C. Efforts to Ensure Meaningful Access Regardless of English Language Proficiency | 6 |
| 1. Undertaking Appropriate Efforts to Determine the Extent of Obligation To Provide LEP Services | 7 |
| 2. Establishing an Effective Language Access Plan | 15 |
| III. Conclusion | 20 |

TABLE OF FIGURES

| | | |
|----------|---|----|
| Figure 1 | Pushbutton English and Spanish versions of video presentations at CSC's Shuttle Endeavour exhibit | 10 |
| Figure 2 | Bilingual English/Spanish PowerPoint describing the Science Center School | 11 |
| Figure 3 | Exhibit panel in English and Spanish in Ecosystems section | 12 |
| Figure 4 | Sample QR code signage at Reuben Wells locomotive exhibit (Children's Museum of Indianapolis) | 14 |
| Figure 5 | Signage indicating multilingual availability of main CSC brochure | 15 |

I. Introduction

This compliance review of the California Science Center Foundation (the Foundation), a recipient of NASA funding located in Los Angeles, California, was conducted under the NASA regulations implementing Title VI of the Civil Rights Act of 1964. Title VI prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance [42 U.S.C. 2000d, et seq.; 14 C.F.R. Part 1250]. NASA Title VI implementing regulations require the Agency to conduct periodic compliance reviews of its grant recipients, stating “[t]he responsible NASA official or his designee shall from time to time, review the practices of recipients to determine whether they are complying with this part.”¹

A. Scope of the Review

The compliance review was limited in scope to Title VI’s prohibition against national origin discrimination, specifically in the context of limited English proficiency (LEP). Under the NASA Title VI implementing regulations, recipients of Federal financial assistance have a responsibility to ensure meaningful access to their programs and activities for persons with limited English proficiency (LEP).² In addition, Executive Order 13166, “Improving Access to Services for Persons with Limited English Proficiency” (August 11, 2000), directed each Federal agency that extends assistance subject to the requirements of Title VI, to clarify Agency recipients’ obligations regarding LEP. To guide agencies in this effort, the U.S. Department of Justice (DOJ) issued a policy guidance document, “Enforcement of Title VI of the Civil Rights Act of 1964--National Origin Discrimination Against Persons with Limited English Proficiency.”³ The DOJ Policy Guidance clarified existing statutory and regulatory requirements regarding LEP, providing a description of the factors recipients must consider in fulfilling their Title VI obligations in the LEP context.

NASA published its Title VI LEP Guidance to Grant Recipients in December 2003.⁴ Consistent with DOJ’s LEP compliance standards and framework, the NASA Title VI LEP Guidance to recipients clarified the responsibilities of institutions and/or entities that receive financial assistance from NASA, to assist them in fulfilling their responsibilities to LEP persons pursuant to Title VI of the Civil Rights Act of 1964. The NASA policy guidance emphasized that in order to avoid discrimination against LEP persons on the grounds of national origin, recipients of NASA financial assistance must take adequate steps to ensure that people who are not proficient in English can effectively participate in and benefit from the recipient’s programs and activities. Therefore, consistent with the guidance, LEP persons should expect to receive the language assistance necessary to afford them meaningful access to the recipients’ programs and activities, free of charge.⁵

¹ 14 C.F.R. Sec. 1250.106(a).

² See 14 CFR Sec. 42.104(b)(2). The NASA Title VI regulations, consistent with DOJ and other federal agency Title VI regulations, state that a recipient may not discriminate by utilizing *criteria or methods of administration which have the effect of subjecting individuals to discrimination because of their national origin*, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program as respects individuals of a particular national origin. 14 C.F.R. Sec. 1250.103-2(b). The Supreme Court, in *Lau v. Nichols*, 414 U.S. 563 (1974), interpreted regulations promulgated by the former Department of Health, Education, and Welfare, including a regulation similar to that of the NASA Title VI regulations, 45 CFR 80.3(b)(2), to hold that Title VI prohibits conduct that has a disproportionate effect on LEP persons because such conduct constitutes national origin discrimination.

³ Published at 65 Fed. Reg. 50123 (August 16, 2000).

⁴ Published at 68 Fed. Reg. 70039 (hereafter cited as NASA Title VI LEP Guidance).

⁵ See NASA LEP Guidance, Supplementary Information.

B. Objectives

Consistent with the NASA Title VI implementing regulations and the NASA Title VI LEP Guidance, the objectives of this review are as follows:

1. To ensure that the Foundation is in compliance with NASA Title VI regulations, and that its policies and practices are consistent with the NASA Title VI LEP Guidance and relevant DOJ guidance, specifically with regard to the steps the Foundation is taking to ensure that people who are limited in English proficiency can effectively participate in and benefit from the Foundation's programs and activities.
2. To report on promising practices of the Foundation with regard to its obligations under Title VI with respect to ensuring meaningful access, regardless of the level of English proficiency.

C. Methodology

NASA notified the Foundation of its selection for a Title VI-LEP onsite compliance review by letter dated January 14, 2013. NASA also forwarded a detailed information request, seeking documentation of the Foundation's provision of services to LEP populations, including a list of translators and Foundation staff responsible for LEP program implementation, as well as a number of Foundation publications printed in English and other languages. The Foundation submitted this information on February 14, 2013. NASA then conducted a desk audit review of information provided by the Foundation.

The onsite phase of the compliance review was conducted on March 20-21, 2013, and included interviews with management and staff, the examination of written documents and publications, and a tour of the museum facilities and exhibits. Interviews with management and staff examined in greater depth the degree to which the Foundation has developed and is implementing LEP-related policies, procedures, and practices. NASA's tour involved a walk-through survey, designed to replicate as much as possible a museum patron's experience of the facility. The focus of the walk-through was on observation of visitor-staff interactions and the availability of appropriate signage for exhibits, public notices, and informational materials in languages other than English.

NASA developed a compliance analysis and report based on all of the relevant information gathered during its pre-onsite and onsite efforts. The compliance report examines the Foundation's overall efforts to provide meaningful access to its programs and services for LEP individuals, consistent with NASA's Title VI regulations and Title VI LEP Guidance to Recipients, as well as relevant DOJ LEP guidance. Additionally, the report identifies "promising practices," using input of management and staff.

D. Program Description

The Foundation and the California Science Center are located south of downtown Los Angeles in the State-owned Exposition Park, adjacent to the Los Angeles Coliseum and the University of Southern California. The California Science Center opened in February 1998. It has over 400,000 square feet of building and exhibit space and has received more than 23 million visitors since its opening, with annual attendance averaging 1.4 million visitors over the past five years. The California Science Center website states that the California Science Center "provides a rare model for science learning by combining exhibits with an on-site Science Center School and Amgen Center for Science Learning as well as a teacher professional development program." The California Science Center offers free admission to the

general exhibit galleries and paid admission to special exhibit galleries, IMAX theatre and certain other attractions in the California Science Center. The Foundation's Mission Statement is:

"We aspire to stimulate curiosity and inspire science learning in everyone by creating fun, memorable experiences, because we value science as an indispensable tool for understanding our world, accessibility and inclusiveness, and enriching people's lives."

A public-private partnership exists between the Foundation and the State of California. The California Science Center (CSC) is a State of California owned and operated museum focused on science and technology. The State of California is responsible for maintaining the Science Center's buildings and grounds, as well as providing more than 120 civil service staff for its daily operations. The Foundation is a nonprofit 501(c)(3) corporation, organized in the State of California that supports its mission by funding exhibits and operating educational programs at the California Science Center. The Foundation raises funds to support the permanent and changing exhibits, educational programs, events, and capital projects at the California Science Center. The Foundation also has funded many of the exhibits currently on display at the California Science Center. The Foundation provides curriculum support, teacher professional development and program support for the Dr. Theodore T. Alexander Science Center School, a partnership between the Los Angeles Unified School District (LAUSD) and the California Science Center that has a science and technology focus.

II. Title VI Compliance Analysis

A. Assurances

Currently, the Foundation receives a two-year Federal grant from NASA; a 2012 Competitive Program for Science Museums and Planetariums (CP4SMP) grant of \$299,902 for implementation of its "Ascent to Orbit" educator professional development program that will train upper elementary and middle school teachers to deliver inquiry-based, hands on activities exploring STEM concepts involved in the evolution of human space exploration. The curriculum will be organized around the: Pre-Shuttle Era, Shuttle/International Space Station Era and Future of Human Spaceflight. The program is expected to serve approximately 100 teachers and 10,200 students during its two-year duration. Also, the Foundation was one of the four museums in the United States to receive a retired NASA Space Shuttle orbiter. On October 11, 2011, NASA officially transferred title of Space Shuttle Endeavour to the Foundation. Endeavour is a permanent exhibit at the California Science Center. NASA has determined that its transfer of Endeavour to the Foundation for a permanent exhibit (which meets the Title VI regulatory definition of "Federal financial assistance"⁶) will establish the Foundation as a NASA recipient for as long as it retains ownership of this orbiter.

As a condition to a grant award's approval, the award must contain an assurance that the program will be conducted or the facility operated in compliance with all requirements imposed by NASA, including Title VI regulations.⁷ The NASA Form 1206, "Assurance of Compliance with the NASA Regulations Pursuant to Nondiscrimination in Federally Assisted Program," serves as the Agency's assurance of civil rights compliance from its grant recipient institutions. NASA reviewed the Foundation's Form 1206 records and confirmed that appropriate assurances of non-discrimination under Title VI have been obtained from the Foundation as grants have been awarded.

⁶ 14C.F.R Sec. 1250.12(d)

⁷ 14 C.F.R. Sec. 1250.104.

B. Compliance Information

The Foundation provided all information requested and access as required by NASA Title VI regulations.⁸ Records of LEP efforts were made readily available, including Web addresses where information regarding the California Science Center’s communications in languages, other than English is displayed. In addition, the Foundation provided copies of publications in Spanish as well as brochures containing floor plans and general information regarding the visitor experience in a variety of languages including Spanish, Chinese, Korean, French, and Japanese that are made available to Museum patrons at the main information desk (see Promising Practices, below). During the on-site review process, the Foundation provided access to its staff for interviews in a secure location and staff provided cooperative responses to questions posed by NASA.

C. Efforts to Ensure Meaningful Access Regardless of English Language Proficiency

The NASA Title VI regulations prohibit a recipient from utilizing methods of administration which have the effect of subjecting individuals to discrimination because of their national origin, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program as respects individuals of a particular national origin.⁹ The regulations also state that a recipient, where it determines that the services and benefits of the program or activity it administers may not in fact be equally available to some racial or nationality groups, may properly give special consideration to race, color, or national origin to make the benefits of its program more widely available to such groups, not then being adequately served.¹⁰

In the context of LEP, these provisions call for a recipient to take adequate steps to ensure that it is providing meaningful access to services to program beneficiaries regardless of their level of English proficiency.¹¹ The NASA Title VI LEP Guidance clarifies obligations of grant recipients under Title VI to ensure meaningful access to LEP persons and provides an analytical framework that recipients may use to determine how best to comply with Title VI statutory and regulatory obligations regarding LEP . In general, the Guidance establishes the following main considerations for determining whether grant recipients are meeting their obligations in this regard: (1) is the recipient taking steps to determine the extent of its obligation to provide LEP services based on a Four Factor Analysis, conducted consistent with applicable guidance and (2) does the recipient’s Language Access Plan (LAP) include appropriate elements of an effective Plan, such as proper notice to LEP populations of available language assistance?

In the discussion that follows, NASA examines the extent to which the Foundation has addressed these main considerations, and the efforts the Foundation is undertaking to provide LEP services through implementation of its LAP. The discussion provides a compliance assessment for each of the four LEP factors, consistent with NASA Title VI regulations and NASA and DOJ guidance.

NASA notes at the outset that the Foundation has taken a number of proactive and innovative steps in furtherance of its LEP obligations, including the establishment of a senior level LEP Working Group that meets regularly to set policy and evaluate progress of the LAP. A number of the Foundation’s promising practices in this regard are cited throughout the report.

⁸ See 14 C.F.R. Sec. 1250.105(b), “Compliance information,” and 14 C.F.R. Sec. 1250.105(c), “Access to sources of information.”

⁹ 14 C.F.R. Sec. 1250.103-2(b).

¹⁰ 14 C.F.R. Sec. 1250.103-4(g).

¹¹ NASA Title VI LEP Guidance, Sec. I.

1. Undertaking Appropriate Efforts to Determine the Extent of Obligation to Provide LEP Services

NASA grant recipients are required to take reasonable steps to ensure meaningful access to their programs and activities by LEP persons.¹² The starting point is an individualized assessment by the recipient that balances the four factors as detailed in the NASA Title VI LEP Guidance, which is addressed below. While designed to be a flexible and fact-dependent standard, the intent of this guidance is to suggest a balance that ensures meaningful access by LEP persons to critical services while not imposing undue burdens on grant recipients. After applying the Four Factor Analysis, a recipient may conclude that different language assistance measures are sufficient for the different types of programs or activities in which it engages.

The Foundation and CSC staff interviewed by NASA stated that they were not aware of the Four-Factor analysis until they were informed of this compliance review. Nevertheless, the President and other key staff informed NASA that they have practiced the main tenets of the LEP Executive Order and the Four-Factor Analysis for many years and language access is integral to the mission of the Foundation, which is to provide quality, accessible science education to the local community. As the local community is overwhelmingly Hispanic, providing Spanish language services has always been paramount for the Foundation. NASA recognizes this high level of demonstrated commitment to the language needs of the local community as a cornerstone of Title VI compliance in the LEP context.

a. Findings of Fact and Compliance Assessment

i. The number or proportion of LEP persons eligible to be served or likely to be encountered by the program or grantee and (ii) the frequency with which LEP individuals come in contact with the program

The first and second factors in the LEP Four Factor Analysis are very closely related, as they both focus on the LEP populations with which a recipient comes into contact. NASA has determined that Factor Two, which is dependent on museum visitor contact and interaction with a museum's staff, is crucial to certifying the results of Factor One analyses, which are largely dependent on statistical data mining and may not capture "on the ground" information and language needs derived from one-to-one contacts. In Factor One, recipients must rely on LEP population data to determine what level of language services they should provide and in what languages, based on the number or proportion of LEP persons from a particular language group served or encountered in the eligible service population. The greater the number or proportion of these LEP persons, the more likely language services are needed.¹³ The NASA Title VI LEP Guidance notes that another way to determine the language of communication is to use language identification cards (or "I speak cards"), which invite LEP persons to identify their language needs to staff wearing the cards. Such cards, for instance, might say "I speak Spanish" in both Spanish and English, "I speak Korean" in both English and Korean, and so on.¹⁴

In this regard, the Foundation informed NASA that they utilize the following sources of information to identify the LEP populations with which it comes into contact, and the frequency of contact:

- the 2000 U.S. Census data for Los Angeles County
- 2011 statistics from Los Angeles Tourism to assess the percentage of international visitors
- the California Science Center Spanish telephone Information Line

¹² Id. at Sec. V.

¹³ Id. at Sec. V.1.

¹⁴ Id. at Sec. VII(1).

- regular visits of school groups with LEP students
- tour group visits of international visitors
- the tracking of requests for language assistance at the information desk, box office and reservations, which is a recent initiative.

The Foundation’s LAP identified the following languages from the 2000 Census data as the most prevalent in Los Angeles County:

- English 46%
- Spanish 38%
- Chinese 3%
- Tagalog 2%
- Korean 2%
- Armenian 2%
- Other 7%

The LAP further provides that “To ensure that the Foundation develops language assistance over time in a manner that ensures equal access by LEP persons to the Science Center, the Foundation tracks requests for language assistance other than Spanish at the information desk, box office and reservations.” Foundation and CSC Staff confirmed to NASA that language needs also may be assessed in other visitor contact situations such as point-of-sale transactions in food service and gift shop areas as well as special events planning. Language utilization can be further tracked by California Science Center visitors seeking the help of staff wearing “I Speak” language tags on the back of their Science Center ID cards that identify the staff member as conversant in a language other than English. The Foundation provided NASA with a roster showing that among 153 staff members, eight languages other than English are spoken. These include Spanish, Korean, Mandarin Chinese, Cantonese Chinese, Igbo, French, Tagalog, Korean and German, which are fluently spoken among the Foundation’s own staff and volunteers (see Promising Practices, below).

Importantly, the results of the Foundation’s analysis in regard to these two factors are fully reflected in its LEP Plan. During interviews with NASA, Foundation and CSC staff stated that they routinely encountered Spanish, French, Japanese, Korean, and Chinese languages spoken by visitors and patrons. NASA also found that the Foundation provided language services in situations that involved one-time events with groups of patrons who spoke infrequently encountered languages such as German and Arabic. Foundation Communications staff informed NASA that the Foundation has published 1,000 California Science Center wayfaring floor maps in Spanish, Chinese, French, Japanese and Korean. These maps are available at the information desk and upon request.

With respect to it largest language group, Foundation staff stated that the Foundation has provided Spanish language materials since 1998. The California Science Center did five years of planning (starting in 1995) regarding it language access efforts on behalf of Spanish speakers. During that period, the California Science Center did approximately one hundred focus groups in the nearby neighborhoods, as they had a point person reaching out to the communities. The focus groups varied in size from 12 to 20, and were conducted with educators and families. The focus groups identified reinforced the need for Spanish language utilization in Science Center programming. Foundation Communications staff also stated that in these early years, they had materials translated in Korean and Mandarin, but they were not used much and therefore there was not a need. It seems that those groups were proficient in English and the translated materials were not being requested. As a result, there was no need to identify language needs in these communities.

Based on this information, NASA finds that the Foundation has conducted an appropriate analysis with regard to the first two factors, as delineated in the NASA Title VI LEP Guidance. Specifically, the LAP, NASA's onsite review, and information provided pre and post-onsite show that the Foundation conducted a careful review and analysis of the demographics of the Los Angeles metropolitan area as well as the Foundation's own LEP encounters. The Foundation used quantifiable, reliable, and objective measurements to determine the number of LEP persons, and the language of those persons the Foundation is encountering on a daily basis and who are coming into contact with the Foundation's programs and services. The Foundation incorporated these factors into its LEP Plan in tangible and meaningful ways (see Promising Practices, below). However, it appears the Foundation has been relying on data from the 2000 Census. NASA would advise the use of the more recent 2010 Census data (see Recommendations, below).

iii. The nature and importance of the program, activity, or service provided by the program to people's lives

Under NASA's Title VI LEP Guidance, the more important the activity, information, service, or program, or the greater the possible consequences of the contact to the LEP individuals, the more likely language services are needed. A recipient needs to determine the implications of denial or delay of access, e.g., life-threatening, to services or information are for the LEP individual.¹⁵

Perhaps the most important kind of program or service referred to in the NASA Title VI LEP Guidance is that which is "life-threatening." While the nature of the Foundation's programs and services is not life-threatening, its programs may be said to be life-enhancing or enriching, and as such have unique importance to those seeking to experience them. In considering this factor, NASA's review indicates that the Foundation appropriately took into account the ways in which denial or delay of services may negatively impact LEP individuals with respect to its most critical services.

(A) Informal Education

The first of these services is access to the California Science Center and its informal education content. The LAP states that the California Science Center is open to the general public 362 days per year. The permanent exhibit galleries are free of charge, but educational IMAX films¹⁶ are ticketed through the California Science Center box office and web site. Special exhibits are periodically brought to the California Science Center for limited periods of time (three to six months) and are occasionally subject to an entry fee (also ticketed through the box office and web site). Language assistance is provided through the following methods:

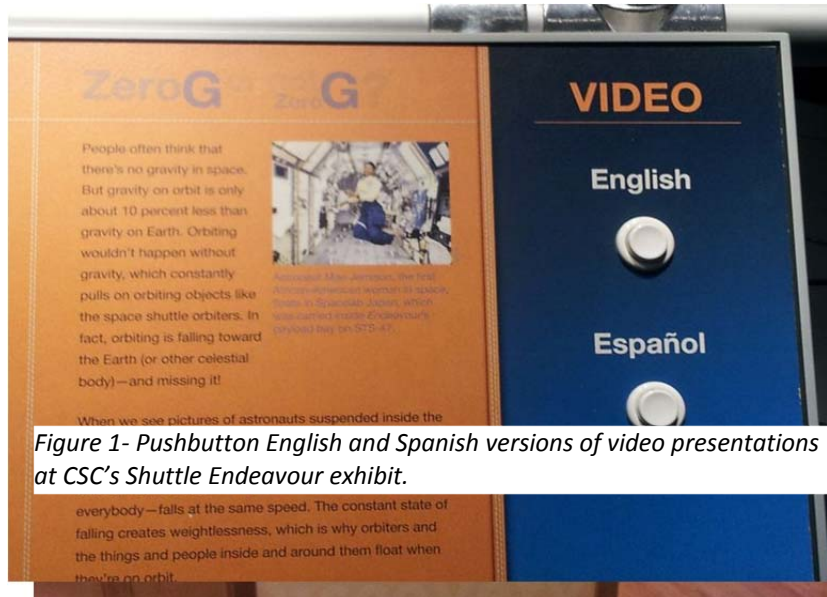
- Bilingual Spanish/English staff is available to the public at the following public interface points: Information Desk, Reservations/Call Center, and Ticket Booth. Other language assistance requests are handled on a case-by-case basis.
- The museum Visitor's Map includes a Spanish insert, and it has published wayfaring maps in Chinese, French, Japanese and Korean (1,000 for each language), which are among the most frequently spoken languages based on the Foundation's analysis under Factors 1 and 2; these are available at key points of entry.¹⁷

¹⁵ Id. at Sec. V.2.

¹⁶ Unlike other science centers, the CSC does not offer first-run (non-educational) motion pictures in its IMAX facilities

¹⁷ See NASA LEP Guidance, Sec. VII(4).

- The California Science Center web site has an embedded Google Translate icon that will translate webpage content into each of the languages most frequently encountered in Factors 1 and 2.¹⁸
- Bilingual Guest Services staff stationed throughout the museum wear “I Speak” badges indicating the languages they speak and a number of staff.



- Spanish language cassettes are available for most IMAX films. By advance reservation, the Foundation can obtain tapes of most IMAX films in other languages. The Foundation currently has 30 headsets for this purpose.
- Audio-visual exhibits are available in English or Spanish.
- Each Discovery Box in the three Discovery Rooms (a children’s interactive learning exhibit) has books and parent question and instruction cards in both English and Spanish.
- Public announcements and media outreach for new exhibits at the museum are in English and Spanish.
- The Science Center’s Exhibit Development Department is designing interactive exhibits that have Spanish language text in video displays that may be activated with a pushbutton labeled “Español”.
- A number of exhibits are translated into Spanish; special exhibits have been translated into other languages, such as Arabic; with respect to exhibits, the Exhibits Director informed NASA that texts are provided in English and Spanish by Audio/Visual content vendors and the quality of the Spanish translation is circulated internally with people who are very proficient in Spanish.

(B) Formal Education

The Foundation and CSC also provide formal educational programs, including the Dr. Theodore T. Alexander, Jr. Science Center School (the Science Center School), Outreach Programs, Community Youth Programs, Summer Camp, Big Lab Programs, and Teacher Professional Development. NASA learned that the Science Center School is a partnership between LAUSD and the CSC with a science and technology focus. The Science Center School is a neighborhood charter school that enrolls 70% of its students from within a two-mile radius of the museum. The school serves approximately 600 students in grades Kindergarten through fifth grade in a bilingual (Spanish/English) education setting. The Science Center

¹⁸ The use of Google Translate, while a cost-effective and innovative use of technology to address LEP issues, should not be utilized as a sole solution to making the Museum’s Web content LEP accessible, especially where such content involves the communication of vital information. In this regard, we note that machine translations are discouraged by DOJ’s most recent LEP recent technical assistance tool (August 2011 Guidance) which states: “The use of machine or automatic translations is strongly discouraged even if a disclaimer is added. ***If an agency [or recipient] decides to use software-assisted translation, it is important to have the translation reviewed by a qualified language professional before posting*** it to the website to ensure that the translation correctly communicates the message.” (Emphasis added.) See DOJ, Common Language Access Questions, Technical Assistance & Guidance for Federally Conducted & Federally Assisted Programs, , Section W, accessible at http://www.lep.gov/resources/081511_Language_Access_CAQ_TA_Guidance.pdf. See also Recommendations, below.

School's program integrates mathematics, science, and the use of technology in order to maximize learning opportunities for all students, especially those identified as at-risk for academic failure, and to create new professional opportunities for teachers through the use of diverse and innovative teaching methods toward the implementation of a rigorous, standards-based instructional program. Specifically, the Foundation provides curriculum support, teacher professional development and program support. CSC and Foundation Education staff stated that they rely on LAUSD for language support for the Science Center School. NASA observed the classroom environment in progress and observed language services necessary to support a bilingual education curriculum.

The Foundation's LAP states that resources for language assistance include bilingual staff (an average of 50% are bilingual in Spanish) and a 40-unit translation headset system. Formal educational LEP services include:

- Program flyers and correspondence (i.e., letters, forms, and parking passes) for teachers, parents and care givers of program participants are provided in English and Spanish.
- Program content and instructions are delivered in Spanish on an as needed basis.
- Translation equipment and a translator are provided for teacher and parent workshops on an as needed basis.
- At least one bilingual registration staff person is available for education program telephone reservations.
- A bilingual staff person is available during summer camp registration and orientation.
- Requests for language assistance in languages other than Spanish are handled on a case-by-case basis.
- Science Center School classes include dual language (English/Spanish) classes at all grade levels.

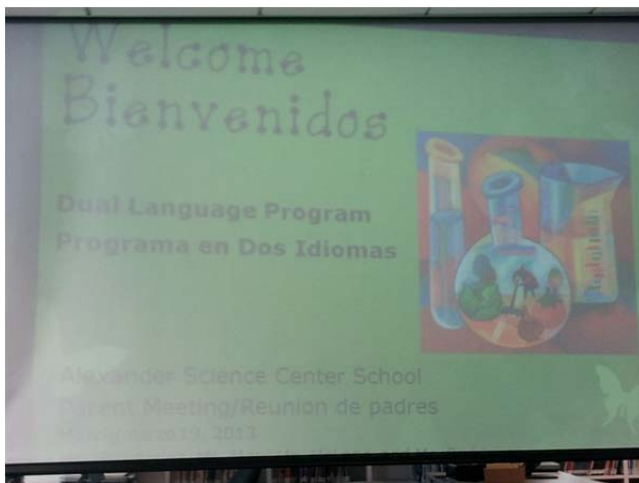


Figure 2– Bilingual English/Spanish PowerPoint describing the Science Center School

Another aspect of this factor is the safety of the museum's visitors and how LEP services can enhance personal safety. As a museum located in one of the most important metropolises in the U.S., CSC is fully aware of the potential for man-made, as well as natural, disasters to create an emergency situation for its staff and visitors. To address this, the Foundation and CSC have primarily relied on training of guest services staff. Guest services staff informed NASA that their training is focused on making it an obligation to help any guest that needs help, regardless of English proficiency. Guest services staff on the museum floor have walkie-talkies and if, for example, a Spanish-speaking guest who does not or cannot communicate in English, and there is no Spanish speaking guest services staffer on the floor at that point (although this would be rare), the walkie-talkie can be used to instantly find a staffer who does and bring them over to

assist. Additionally, the CSC guest services staff is trained on first aid and emergency evacuation procedures for bomb threat, earthquakes and fires. Guest Services staff are taught to mitigate language barriers by using international signals that are visual in nature, for example, by pointing with one arm or hand and not using fingers. This is critical since guest services staff is the first line of response.



Figure 3– Exhibit panel in English and Spanish

iv. The resources available to the grantee/recipient and costs

A recipient’s level of resources and the costs that would be imposed on it in addressing language assistance needs may have an impact on the nature of the steps it should take.¹⁹ In this regard it is noteworthy that the “safe harbor” provision of NASA’s Title VI LEP Guidance allows for recipients to provide written translations of vital documents for each eligible LEP language group that constitutes five percent or 1,000, whichever is less, of the population of persons eligible to be served or likely to be served to be affected or encountered. Also, if there are

fewer than 50 persons in a language group that reaches the five percent trigger, the recipient does not have to translate vital written materials but may provide written notice in the primary language of the LEP language group of the right to receive competent oral interpretation of those written materials, free of cost.²⁰

As previously stated, the Foundation informed NASA that its Four Factor Analysis revealed the only language that approached the five percent standard would be Spanish. However, as a general matter, the Foundation has chosen not to avail itself of the safe harbor provision, instead undertaking efforts reflective of the variety of languages it encounters on a regular basis without regard to the five percent standard. NASA commends the Foundation on this approach and views this as a best practice (see Promising Practices below).

NASA found that the Foundation has provided LEP services to visitors and program participants for Spanish and other languages through the use of their own resources as well a number of cost-reduction vehicles that rely on leveraging existing external resources. NASA found several examples of these vehicles, including: 1) the hiring of bilingual and multilingual staff; 2) the use of outside organizations to provide translation and interpretation services for Foundation activities; 3) appropriate allocation of existing Foundation resources for LEP services according to need and demand. NASA found that the Foundation is undertaking innovative and cost-effective practices (see Promising Practices, below).

With respect to the Foundation staff, NASA found that bilingual and multilingual staff have been called upon to use these skills. For example, one Communications staff member has used her French interpretation skills for the Endeavour exhibit, and a press conference for this exhibit was performed in both English and Spanish by Foundation staff. NASA also found that Guest Services and Food Services staff routinely provide instant interpretation and translation services for visitors who need those services in “one off”, informal situations, such as asking for directions or for information regarding menu options. In fact, the need for these services is so routine that the Foundation is considering a requirement for bilingual language capability for some new Guest Services positions.

NASA found that the Foundation regularly retains the use of external organizations to assist in their effort to provide language services. The Foundation pays for some of these services, while others are either provided free of charge or as an adjunct of long-term partnerships for a variety of programs and services. The Vice President for Communications informed NASA that due to limited financial resources, the Foundation has developed a number of partnerships to provide interpretation, translation and content

¹⁹ NASA Title VI LEP Guidance, Sec. V(3).

²⁰ Id. at Sec. VI.B(a).

services for programming, These include the Los Angeles Tourism and Convention Board, which has translated information about the space shuttle Endeavour into other languages and shared with Los Angeles communities, and Northrop Grumman (NG), which gave the Foundation a grant from NG's Arabic Speaking Employee's Group to develop strategies on how to hire interpreters and do fundraising for the Foundation's Thousand and One Inventions.

Lastly, NASA found that the Foundation has made the appropriate allocation of existing Foundation resources for LEP services according to need and demand. NASA found this is regularly the case with languages that do not meet the five percent threshold, such as the Asian languages, French, German and Armenian. One example is the 1000 maps in each of the above languages (as well as Spanish) that are available at the front desk upon request.

NASA concludes that the Foundation has appropriately conducted a Four-Factor Analysis, and imbued their resulting LAP with the key findings of that analysis, as they are required to do under Title VI, and relevant DOJ and NASA LEP Guidance.

b. Recommendations

i. Use the more recent 2010 Census data and redefine service area for the Factor One and Two analysis. The Foundation should use the most recent Census data available, since the most prevalent language groups in Los Angeles may have changed in size and proportion of total population since the 2000 Census. Staff informed NASA that since the opening of the Endeavour exhibit, it has experienced an increase in the number of visitors, especially visitors from other regions and international visitors. Given this trend, the Foundation would do well to monitor the number and proportion of these visitors to the museum. Furthermore, NASA has determined that the serving area of Los Angeles County may not reflect the full scope of local visitorship to the California Science Center. The Foundation should do a more in-depth analysis of its local serving area to determine how many people are visiting the museum from neighboring counties and determine if the Factor One and Two analyses should be extended to include these counties. That can be accomplished by determine the residing counties of membership holders, ticket or reservation holders, locations of schools that hold "class trips" at the museum, entering zip codes at point of sale for gift shop or food purchases.

ii. Enhancing Efforts to Make Web Content LEP Accessible. NASA recommends that the Foundation look into alternative mechanisms for addressing issues of Web content accessibility. We recommend a review of the section of DOJ's August 2011 guidance, "Understanding when/how to make your website more accessible to LEP persons."²¹ This section of the guidance links to the "Top 10 Practices for MultiLingual Websites" which states: "Online communications must address the language preferences of users. The use of [machine or automatic translations](#) is strongly discouraged even if a disclaimer is added. If government agencies decide to use software assisted translation, ***have the translation reviewed by a qualified language professional before posting it to the website to ensure that the translation correctly communicates the message.***"²² (Emphasis added.) Materials and information provided through the guidance and various sites to which it is linked provide excellent resources for enhancing online content to better meet the language needs of LEP individuals reviewing the Science Center's Web site. The key is to determine which Web content and exhibition related information on the Science Center's floor

²¹ See DOJ August 2011 guidance at Section W (accessible at http://www.lep.gov/resources/081511_Language_Access_CAO_TA_Guidance.pdf).

²² See <http://www.howto.gov/web-content/multilingual/best-practices>; See also, Section W of the DOJ August 2011 guidance at http://www.lep.gov/resources/081511_Language_Access_CAO_TA_Guidance.pdf.

are vital, within the meaning of the relevant guidance, and then to provide translation that meets applicable quality standards accordingly.

NASA also recommends providing QR (Quick Response) codes²³ on exhibits for languages other than English or Spanish where exhibit text can be accessed in languages such as Japanese, Chinese or Korean, where the QR codes would access a multilingual exhibit guide on the CSC website. Shown below is a QR code on exhibit signage for the Reuben Wells locomotive exhibit at the Children’s Museum of Indianapolis. This QR code will take you directly to a Wikipedia page describing the locomotive.



Figure 4– Sample QR code signage at Reuben Wells locomotive exhibit (Children’s Museum of Indianapolis)

iii. Mystery Shopper and Survey Program. NASA found that Guest Services has a robust visitor experience feedback program. One component is the use of “mystery shoppers” that are chosen by an outside firm to visit the museum without the on-duty staff’s knowledge, view exhibits, use its services and engage Foundation staff. They report back on the quality of their experience at the museum, how helpful staff is, how useful the programs and services are. The Mystery Shoppers get a fee for their participation. Also, the Foundation deploys online and written surveys to query visitors on the quality of their experience. Staff report that these customer feedback programs and both very useful. However, they have not yet extended the scope of these programs to the LEP visitor experience or the quality or availability of the Foundation’s language access services. The Foundation should consider using these feedback tools for their language access programs and services.

²³ QR Codes allow instant access to websites via smartphone camera with a scanner application. The Smartphone user engages the QR scanner application, points the smartphone camera at the QR code until the scanner application indicates it has read the QR code, which means that the web browser on the smartphone will open a webpage that is tied to the QR code.

c. Promising Practices

i. **Innovative and Cost-Effective Mechanisms for Improving LEP Access.** The Foundation has leveraged its partnerships with outside entities such as a neighboring mosque for Arabic language services, Para Los Niños and Spotlight Media for Spanish language services. Furthermore, the Foundation permits tour groups and other groups to bring in their own translation services and support for those efforts is provided by the Foundation as appropriate. Numerous staff people can provide instant language assistance in several languages in Education, Food Services, Guest Services and other areas. Staff persons with bilingual or multilingual skills are identified by “iSpeak” cards inserted into or onto their ID holders. Guest Services will require bilingual or multilingual skills for new hires in certain positions that have frequent visitor contact.

ii. **Guest Services Language Assistance Log.** Guest Services staff have recently initiated a language request log. For example, the log tracks each time a non-English visitor guide is requested at the Front Desk for taking the visitor guides. The log tracks language assistance requests by language and is done in daily, weekly and monthly intervals.

2. Establishing an Effective Language Access Plan

a. Findings of Fact and Compliance Assessment

After completing the Four Factor Analysis and deciding what language assistance services are appropriate, a recipient should develop a language access implementation plan to address the identified needs of the LEP populations they serve.²⁴ The development and maintenance of a periodically-updated written Language Access Plan (LAP) for LEP persons for use by recipient employees serving the public will likely be the most appropriate and cost-effective means of documenting compliance and providing a framework for the provision of timely and reasonable language assistance. Further, a written LEP Plan provides the basis for fully leveraging the Four Factor Analysis to provide meaningful access to programs and services for LEP individuals. This means undertaking a number of practical, “real-world” steps, including, but not limited to, helping employees to identify the language of the LEP persons they encounter; providing appropriate language assistance measures and training of staff, e.g., how to respond to LEP individuals who have in-person contact with staff; and providing notice to LEP persons of language services available.

Two recent LEP guidance documents from DOJ, “Language Access Assessment and Planning Tool for Federally Conducted and Federally Assisted Programs” (May 2011) and “Common Language Access Questions, Technical Assistance and Guidance for Federally Conducted and Federally Assisted Programs” (August 2011), provide in-depth information to Federal agencies and their grant recipients on developing and implementing language access plans consistent with LEP requirements.²⁵ The new guidance documents build on the original “Four Factor” analysis by identifying the components parts of an effective LEP plan. These include:

- Identification of persons who will implement the plan;
- Identification and assessment of LEP communities;

²⁴ NASA Title VI LEP Guidance, Sec. VII.

²⁵ The DOJ May 2011 guidance may be accessed at:

http://www.lep.gov/resources/2011_Language_Access_Assessment_and_Planning_Tool.pdf; the August 2011 guidance is accessible at: http://www.lep.gov/resources/081511_Language_Access_CAQ_TA_Guidance.pdf.

- Identification of funding and procurement issues;
- Notice of language assistance services;
- Staff training on policies and procedures;
- Collaboration with LEP communities and other stakeholders;
- Monitoring and updating of policies, plan and procedures; and
- Description of timeframe, objectives and benchmarks²⁶.

The Foundation has a formal LEP plan in place, the LAP referenced above. NASA’s compliance assessment of the LAP will focus on whether, or the extent to which, each of these factors is addressed in the Plan.

i. Identification of persons who will implement the plan

DOJ guidance regarding this plan element states: “A plan should describe the management staff, workgroup, committee, or other agency staff who will be responsible for creating and overseeing the policy directives, developing and modifying the language access plan, and establishing and implementing operational procedures.”²⁷ DOJ recommends recipients name a Language Access Coordinator. In this regard, the Guidance states: “The language access coordinator should be or report to a high-ranking official within the agency since high level support is essential to successful implementation. The coordinator is responsible for language assistance services and may delegate duties but should retain responsibility for oversight, performance, and implementation of the language access plan.”²⁸

The LAP states that “responsibility for implementing the Foundation Language Assistance Policy with regards to Public Access to the Science Center rests primarily with the Director of Guest Services. In the area of Access to Education Programs, the responsibility rests with the Deputy Director of Education. For exhibit audiovisual exhibits, responsibility rests with the Deputy Director of Exhibit Development. These individuals are also responsible for monitoring the quality and effectiveness of the current policy and procedures.” Foundation staff informed NASA that there is an LAP work group in place, which met and collaborated to develop the LAP. However, it appears that this work group is informal in nature and is not as structured and formalized (i.e., regular membership, meeting schedule, assignments and delineation of tasks) as similar work groups in other museums and science centers of which NASA is aware (see Recommendations, below).

ii. Identification and assessment of LEP communities

This element reiterates and reinforces Factors 1 and 2 of the Four Factor Analysis. The Foundation has fully addressed these factors in its Plan. Accordingly, NASA finds no compliance issues.

iii. Identification of funding and procurement issues

NASA found that the LAP does not contain any such identification, nor is Factor 4 of the Four Factor Analysis fully addressed in the LAP. NASA recommends that the Foundation provide an outline of financial and other resources it utilized for language services. This would include budget, interpretation/translation services under contract, all partnerships with the external entities the Foundation have an ongoing relationships.

²⁶ DOJ May 2011 guidance, p. 17.

²⁷ Id., p. 18.

²⁸ Id., p. 19.

iv. Notice of language assistance services

This Plan element incorporates Factor 3 of the Four Factor Analysis, although the Plan element focuses specifically on how LEP individuals are informed of the services provided. NASA’s LEP Guidance suggests several possible means of LEP notification, including posting signs in intake areas and other key entry points, stating in outreach documents that language services are available from the NASA recipient, and using a telephone voice mail menu, among others.²⁹ The Foundation is utilizing these and other methods, both face-to-face, in print, and online, for notifying LEP visitors and potential visitors (as demonstrated in the sign at the front desk depicted above). In fact, the Foundation has undertaken a wide array of efforts in this area (see Sec. II.C.1.a(iii), above).



Based on the above, NASA finds that the Foundation is meeting requirements and that it is giving appropriate consideration to guidance on notice to LEP program participants and potential participants.

v. Staff training on policies and procedures

Staff having contact with the public (or those in a recipient’s custody) should be trained to work effectively with in-person and telephone interpreters.³⁰ The Foundation reports that staff is interacting with the public. The LAP

Figure 5– Signage indicating multilingual availability of main Foundation brochure at Guest Services desk

tes that, “Foundation staff in the Guest Services and Educational program areas will be trained to respond appropriately to requests for language assistance from Science Center visitors and program participants.” Staff informed NASA that new employees and volunteers undergo orientation training that includes training on the provision of language services. Guest Services staff informed NASA that Guest Services staff was informed of the LAP in a staff meeting on March 8th, 2013. NASA also found that the Foundation has taken steps to incorporate LEP considerations into its emergency and every-day security measures by training floor staff to use gestures and physical actions to alert visitors to emergency evacuations.

It appears the Foundation is taking steps consistent with NASA’s LEP Guidance to recipients regarding staff training to serve LEP individuals. However, the LAP should contain more information on how staff are trained and the types of training Foundation employees receive. (See also “Recommendations,” below.)

²⁹ NASA Title VI LEP Guidance at Sec. VII(4).

³⁰ Id. at Sec. VII(3).

vi. Collaboration with LEP communities and other stakeholders

DOJ guidance recommends that Language Access Plans include provisions for creating and conducting outreach and the actions needed to implement an effective system to gather feedback and involve outside entities or individuals in the review process.³¹ Efforts should be made to provide information to the public and LEP communities regarding the language assistance services available free of charge. Such efforts should include community-focused outreach and coordination with other agencies and stakeholders.³² Importantly, the Foundation's LEP work group includes the heads of all relevant programs for this area of its Plan, such as its Education, Communications, Exhibit Development and Guest Services and Membership leads, all of whom make contributions to the implementation of the LAP.

NASA finds that with respect to collaboration with LEP communities and other stakeholders, the Foundation's efforts are fully reflective of and consistent with relevant guidance. For example, regarding outreach to LEP communities, the Foundation maintains long-standing relationships with a number of Los Angeles- Hispanic and Asian media outlets, as they are invited to many of its events, and provides foreign language proficient staff experts and scientists at specific events (see Promising Practices, below).

vii. Monitoring and updating of policies, plans and procedures

Consistent with relevant guidance, the Foundation has in place a structure, through its LEP Working Group, for monitoring and updating its policies, plans, and procedures. NASA will continue to observe their efforts through ongoing technical assistance and a formal follow-up six months from the issuance of this report.

viii. Description of timeframe, objectives and benchmarks

Currently the Science Center's LEP Plan does not have timeframes, objectives, and benchmarks as described in relevant guidance. (See Recommendation for LEP Plan Enhancements, below.)

b. Recommendations

i. LEP Plan Enhancements. The Foundation may wish to enhance its LEP Plan to continue to ensure that it fully utilizes and reflects current Federal guidance on LEP compliance. In this regard, NASA recommends that the Foundation continue to carefully review DOJ's May and August 2011 LEP guidance documents to incorporate key Plan elements identified by DOJ not already explicit in the Foundation's Plan. For example, DOJ guidance recommends that LEP Plans for recipients should "detail the chains of command for authority and oversight and explain any coextensive responsibility and coordination with other agencies, divisions, and offices." The guidance documents also provide further explanation and detail regarding, for example, the roles and responsibilities of an LEP coordinator, the establishment of a process for LEP individuals to provide feedback if they believe they are being denied services because of their lack of English proficiency, the development of multilingual Web sites, the purposes and utility of monitoring and updating LEP Plans, hiring and utilization of bilingual staff, and considerations for assessing current staff's ability to provide language assistance. These are just a few examples of the kinds of information provided in the guidance that the Foundation may wish to use to further enhance its LEP Plan.

³¹ DOJ May 2011 Guidance, pp. 18-19.

³² Id., at p. 20.

NASA recommends that the Foundation focus particularly on sections of the DOJ guidance documents dealing with translation of vital information and hiring, training, and utilization of bilingual staff. While the Foundation has a longstanding tradition of providing language access through a number of these efforts, because they are so critical to effective LEP Plan implementation, we believe these areas bear close and continuing scrutiny by recipients (see also Recommendation at Sec. II.C.1.b, above). In addition, we recommend the Foundation imbue the Plan with appropriate timeframes, objectives and benchmarks for any elements of the LAP for which development and implementation are ongoing, consistent with DOJ guidance. Finally, NASA recommends that the Foundation take steps to provide a more formal structure to its LAP work group so it can regularly monitor implementation of the LAP and collaborate on any revisions, adjustments to the LAP and its tasks.

ii. Training. While it appears that Foundation staff are provided with a comprehensive training in Foundation policies and procedures, staff interviewed by NASA stated that the LAP was covered in that training, but NASA was unable to confirm the depth and breadth of the provided training for language services. We recommend that the Foundation supplement its orientation with additional language assistance training materials by obtaining a copy of DOJ's new video series, *Overcoming Language Barriers*, designed as a training tool for management and language coordinators of Federal agencies and recipients seeking to improve their ability to provide meaningful access to LEP individuals. The video is comprised of three segments: (1) Creating language access policies, plans, and procedures – 25 minutes; (2) Approaches to ensuring the quality of language assistance services – 35 minutes; and, (3) One agency's experience implementing a language access program – 19 minutes. To receive copies of the video series, an accompanying summary document, or if to ask any follow-up questions, the Science Center should send an email request to DOJ's Federal Coordination and Compliance Section at LEP@usdoj.gov.

c. Promising Practices for NASA Grant Recipients

i. Formal and Informal Education Related Activities. NASA recognizes many of the Foundation's education related activities as best practices for incorporating LEP components and working closely with LEP stakeholders to realize increased access for language minorities to its programs and services. For example, the LAUSD is a close partner with the Foundation as they operate the Charter School inside the CSC's facility. The Foundation has demonstrated other collaborative efforts with external partners, including Para Los Niños for science education from Pre-School up to middle school. Para los Niños, which serves the poorest areas of Los Angeles, also provides scholarship money for those students to come to summer camp at the CSC. NASA also found that the Foundation partnered with a local mosque for language services or assistance with the development of exhibit and program content. These programs include Outreach Programs, Community Youth Programs, Summer Camp, Big Lab Programs, and Professional Development of teachers. Several of these programs, such as the Family Science Program are conducted in Spanish or bilingually, or provide language assistance.

ii. Staff Recruitment and Involvement. The Science Center's is seeking bilingual English/Spanish or multilingual candidates for certain positions (Information Specialist) and routinely seeks candidate with these skills for a number of positions, particularly in the Guest Service area. In addition, the Foundation has instituted a Language Button Program ("I speak cards") with "I speak..."cards worn by over 153 staff (currently) speaking eight languages. Importantly, the Foundation conducts training for the staff wearing the buttons. Information booths are located at the main entry points to the Science Center and at ticket desks marked with the international symbol "i". They are usually staffed with persons wearing the "I speak..." buttons who can provide foreign language services.

III. Conclusion

Based on its compliance review, NASA finds that the Foundation is in full compliance with the requirement to take adequate steps to ensure meaningful access to LEP individuals, as clarified in the NASA Title VI LEP Guidance and recent DOJ guidance. The Foundation and Science Center have long provided language assistance to their service community as part of their routine operations. In addition, since becoming informed of its obligations to conduct a Four Factor Analysis and develop a written LEP Plan at the outset of this review, the Foundation has met, and in many cases, exceeds LEP obligations.

More specifically, the Foundation has undertaken a thorough Four Factor Analysis, appropriately utilizing NASA's LEP Guidance. The Foundation also has developed a Language Access Plan that conforms largely with NASA and DOJ Title VI-LEP regulations and policy, with one notable exception – the use of a machine translation, Google Translate. This is a practice discouraged by DOJ. NASA recommends that the Foundation have its use of Google Translate reviewed by a qualified language professional, among other things (see Recommendation, pp. 9-10). Nonetheless, in many ways, the Foundation's commitment to LEP, as demonstrated through its LEP Plan and the programs and initiatives the Foundation is pursuing under the Plan, is a model for similar organizations with LEP responsibilities. NASA plans to disseminate Foundation's promising practices to our other museum and science center grant recipients to assist them in meeting LEP requirements.

NASA stands ready to provide further technical assistance to the Foundation as it continues to meet its LEP obligations under Title VI of the 1964 Civil Rights Act. We will contact the Foundation in six months from the date of the issuance of this report to request a follow-up on NASA's recommendations to enhance the Foundation's existing compliance.