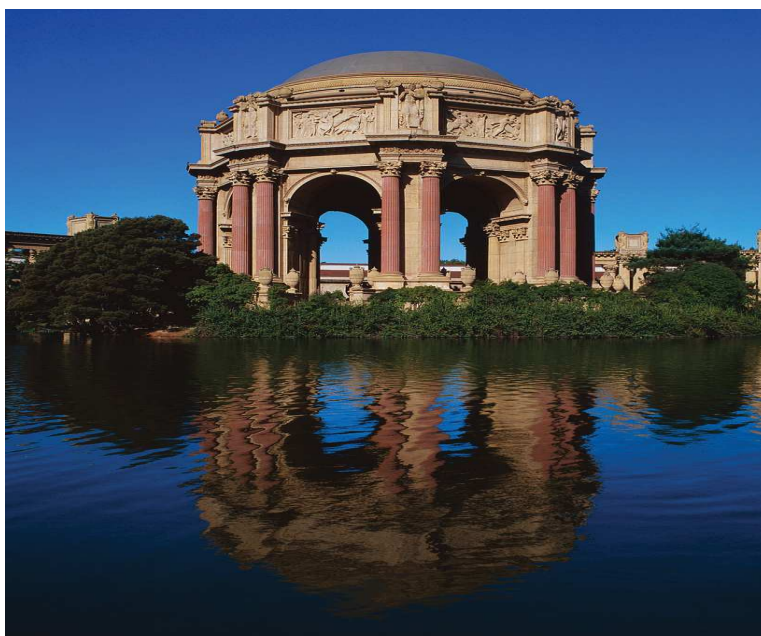


Title VI-LEP Compliance Report



Exploratorium Museum

**Office of Diversity and Equal Opportunity
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I. Introduction

This compliance review of the Exploratorium Museum (“Exploratorium” or “the Museum”), a recipient of NASA funding located in San Francisco, California, was conducted under the NASA regulations implementing Title VI of the Civil Rights Act of 1964, which 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.” 14 C.F.R. Sec. 1250.106(a).

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). See 14 CFR Sec. 42.104(b)(2).¹ In addition, Executive Order 13166 (August 11, 2000) directed each Federal agency that extends assistance subject to the requirements of Title VI, to clarify Agency recipients’ obligations regarding LEP, consistent with the compliance standards and framework detailed in the U.S. Department of Justice (DOJ) Policy Guidance, “Enforcement of Title VI of the Civil Rights Act of 1964--National Origin Discrimination Against Persons with Limited English Proficiency,” (65 Fed. Reg. 50123) (August 16, 2000). 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. (68 Fed. Reg. 70039) (“NASA Title VI LEP Guidance”). 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

¹ 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.

meaningful access to the recipients' programs and activities, free of charge. NASA Title VI LEP Guidance, Supplemental 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 recipient is in compliance with NASA Title VI regulations and that its policies and practices are consistent with the NASA Title VI LEP Guidance, specifically with regard to 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.
2. To report on promising practices of the recipient with regard to its obligations under Title VI with respect to ensuring meaningful access regardless of the level of English proficiency.

C. Methodology

The compliance process began with a desk audit review of information provided by Exploratorium in response to a detailed NASA information request regarding the Museum's efforts to ensure meaningful access to its programs and services for persons with limited English proficiency (LEP).

The onsite phase of the compliance review was conducted on March 17 – 19, 2009. NASA's on-site activities included interviews with management and staff, and the examination of written documents and publications. Interviews with management and staff examined in greater depth the degree to which the Museum has developed and is implementing LEP related policies, procedures, and practices. Also, NASA examined the Museum facility by way of a walk-through survey, much the same as a visitor might experience the Museum during a visit or tour of the Exploratorium. During the on-site tour of the Museum, the focus was on observation of visitor-staff interactions, the availability or absence of appropriate signage on exhibits, and the availability of 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 pre-onsite and onsite efforts. The compliance report examines the Exploratorium's overall efforts to provide meaningful access to its programs and services for limited English proficient (LEP) individuals, consistent with NASA's Title VI regulations and Title VI LEP Guidance to Recipients. Additionally, the report identifies "promising practices" using input of Exploratorium management and staff at various levels within the organization.

D. Program Description

The Exploratorium's Mission is:

"To create a culture of learning through innovative environments, programs and tools that help people nurture their curiosity about the world around them."

The Exploratorium opened in 1969. Located in San Francisco, the Exploratorium has extended its philosophy of learning beyond the Museum's doors, sharing its resources nationally and internationally to any who wish to take advantage of, or replicate, its innovative approach to exploring science, art, and human perception.

More than half a million visitors, including 120,000 children and teachers on school field trips, come to the Exploratorium each year. The Web site at www.exploratorium.edu receives over 17 million unique visits annually, and more than 7 million people see Exploratorium-designed exhibits displayed at science centers around the world.

The Exploratorium recipient receives Federal grant funding from NASA and the National Science Foundation. The Museum currently has a grant for research from NASA that runs through early 2010. The purpose of the research is to send NASA and Exploratorium scientists and educators, along with the Museum's "Live@ the Exploratorium" technical crew, to the northern reaches of China in 2008, and to the island of Rapanui (Easter Island) in 2010. In the field, team members will work with local communities to set up more than half a ton of equipment and, via satellite and the internet, transmit live eclipse images in real-time to an international audience of tens of millions of people, both through the public media and NASA-TV. These webcast programs will feature NASA scientists and educators interpreting the eclipses, which cannot be seen in the United States, for a global audience. Program content in 2008 will focus on International Heliophysical Year; in 2010, on solar maximum. In addition to these live programs, the Exploratorium will also update its award-winning web site to archive these presentations for ongoing availability. The Exploratorium and NASA will stream the program live to the five-million-plus virtual "residents" of the online world of second life, and make portions available through the national science digital library and on popular video-sharing venues such as Youtube.

The grant also funds research to work with the Asian-American, Hawaiian, and Pacific Islander communities in the U.S. to develop a new educational web site that will focus on the celestial navigation traditions and accomplishments of the Pacific Islands.

II. Title VI Compliance Analysis

A. Assurances

As a condition to a grant award's approval, it 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. 14 C.F.R. Sec. 1250.104. NASA reviewed its records and affirmed that assurances of non-discrimination under Title VI have been obtained from the Exploratorium as grants have been awarded.

B. Compliance Information

The recipient provided all information requested and access as required by 14 C.F.R. Sec. 1250.105(b), "Compliance information," and 14 C.F.R. Sec. 1250.105(c), "Access to sources of information."

Records of LEP efforts were made readily available, including Web addresses where information regarding the Museum's communications in languages other than English were displayed. In addition, the Museum provided copies of brochures and maps that had been made available to the public. During the on-site review process, the recipient provided access to Exploratorium staff for interviews in a secure location and staff provided cooperative responses to questions that were 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. 14 C.F.R. Sec. 1250.103-2(b). 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. 14 C.F.R. Sec. 1250.103-4(g).

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. NASA Title VI LEP Guidance, Sec. I. 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 considerations for determining whether grant recipients are meeting their obligations in this regard:

- Determining the extent of its obligation to provide LEP services based on the "Four Factor Analysis;" and
- Providing the elements of an effective Language Assistance Plan (LAP), including selecting appropriate language assistance services, e.g., interpretation and translation.

In the discussion that follows, NASA examines the extent to which the Exploratorium has addressed these considerations, and what more the Museum needs to do to determine the extent of its obligations to provide LEP services and develop an effective LAP. The discussion provides a compliance analysis and recommendations for how the Exploratorium should undertake a Four Factor Analysis and develop an LAP, needed in order for the Museum to meet its obligations under Title VI, consistent with NASA Title VI regulations and policy guidance.

1. **Efforts to Determine the Extent of Obligation To Provide LEP Services**

Recipients are required to take reasonable steps to ensure meaningful access to their programs and activities by LEP persons. NASA LEP Title VI Guidance, Sec. V. While designed to be a flexible and fact-dependent standard, the starting point is an individualized assessment that balances the four factors addressed below. The intent of this guidance regarding the four factors is to suggest a balance that ensures meaningful access by LEP persons to critical services while not imposing undue burdens on small business, small local governments, or small nonprofits. 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.

(a) **The number or proportion of LEP persons eligible to be served or likely to be encountered by the program or grantee:**

(i) **Findings of Fact:**

The Exploratorium conducted a study of the San Francisco demographics to determine the primary groups likely to encounter the Exploratorium and found that Chinese are 33% of the metropolitan area's population. Moreover, it determined that Hispanics (non-white) comprised 14% of the population. These numbers influenced the decision to focus language communication in alternative ways to these two groups. The Exploratorium is aware through anecdotal information it reported in an August 2008 position paper that it has often received requests from travelers from the following languages: Russian, Spanish, French, Chinese (Mandarin) and some Slavic languages. Interviews with Exploratorium staff confirmed that they received such requests. However, it has not conducted a survey consistent with the Four Factor Analysis laid out in the NASA Title VI LEP Guidance to determine the frequency with which the population expresses a need for alternative language services or translation.

(ii) **Compliance Analysis:**

The first "factor" in the LEP Four Factor Analysis to determine what language services recipients should provide is 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. NASA Title VI LEP Guidance, Sec. V.1

As stated in (a) (i) above, the Exploratorium collects and maintains information on the number or proportion of its visitors that speak alternative languages through studies and surveys. The Exploratorium further advised NASA that these surveys are done periodically during the year through an exit survey. However, the Exploratorium has not used this information to conduct a Four-Factor Analysis or develop a formal Language Assistance Plan. Such efforts are critical, for example, in designing and modifying exhibits to make learning and education more accessible.

(iii) **Recommendation:**

The Exploratorium should build on the work it began with its August 2008, position paper to develop a written LEP Four Factor Analysis consistent with the NASA Title VI LEP Guidance to Recipients. The Exploratorium's Four Factor Analysis should include a statistical analysis of the area surrounding the Museum, using Census data as needed. Such data may be found at the U.S. Census Bureau website under "State & County Quick Facts: San Francisco County, California" See Appendix C. This first factor, number or proportion of LEP persons in the eligible service area, is closely related to the second factor, frequency with which LEP individuals come into contact with the program, and so this recommendation should be read in tandem with the recommendations for that factor (see below).

(b) **The frequency with which LEP individuals come in contact with the program:**

(i) **Findings of Fact:**

The Exploratorium has not conducted a survey to determine the overall frequency of contact with persons of Limited English Speaking capacity. During interviews, Exploratorium staff noted that, in addition to efforts related to the development of the August 2008 position paper, staff has occasionally observed that the Museum does indeed have LEP visitors on a regular basis, in part through responses to requests for information provided to LEP individuals.

NASA notes in this regard that the partnerships the Museum has with international institutions play a role in who visits the Exploratorium from abroad, as these partnerships are advertised in the Museum's communications materials displayed at its international partner facilities. The range of these international partnerships is extensive and includes more than 17 locations in Europe, seven in Asia, four in South America, and two in Africa.

(ii) **Compliance Analysis:**

Frequency with which recipients come in contact with the program is the second of the four factors in the Four Factor Analysis. Recipients should assess, as accurately as possible, the frequency with which they have or should have contact with an LEP individual from different language groups seeking assistance. NASA Title VI LEP Guidance, Sec. V.1.

Some of the basic considerations that would be appropriate for the Museum to take into account in conducting this aspect of an LEP Four Factor Analysis are as follows. To begin with, a careful review of the demographics of the San Francisco metropolitan area is needed (see Sec. C.1(a)(iii), above).

In addition, NASA notes that the location of the Museum, San Francisco, is an international travel destination. As noted, the Museum has a number of international partners and these partnerships are well-publicized. As a consequence the Exploratorium receives visitors from around the world who seek to experience the Museum's exhibits and programs. This must be taken into account in determining the frequency with which LEP individuals come into contact with the Museum's programs and services.

(iii) **Recommendation:**

The Museum's Four Factor Analysis should include an assessment of the number of LEP persons served or encountered in the eligible service population. This assessment should be based on quantifiable, reliable, and objective measurements such as a random sampling of visitors to the Museum to allow the Museum to determine with as much accuracy as possible the number of LEP persons, and the language backgrounds of those persons the Museum is encountering on a daily basis coming into contact with Museum's programs and services.

(c) **The nature and importance of the program, activity, or service provided by the program to people's lives:**

(i) **Findings of Fact:**

The Exploratorium, through its mission statement, has accepted the challenge of expanding awareness of and interest in science, a critical national imperative that extends to all individuals in the U.S., regardless of English language ability. 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 its programs and services is not life-threatening, the Museum's programs may be said to be life-enhancing or enriching, and as such have unique importance to those seeking to experience them.

(ii) **Compliance Analysis:**

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. NASA Title VI LEP Guidance, Sec. V.2.

In considering this factor, the Museum also must take into account the ways in which denial or delay of services may negatively impact LEP individuals. For example, it appears that the Museum's displays and exhibits sometimes require some form of instruction, written or verbal, to get the full experience. Such instruction is provided in English but not in other languages. In another example, NASA observed the Museum's use of film without foreign-language captioning makes the film less accessible to visitors who have limited or no English language skills. As a consequence, the experiential learning model to which the Museum is committed may be compromised for LEP individuals.

Another aspect of this factor is the safety of the Exploratorium's visitors and how LEP services can enhance personal safety. It should be noted that the Exploratorium is in a urban environment and is housed in a building that is almost 100 years old in a city well-known for having seismic activity. There appears to be no provision of language services in the event of an emergency to assist during evacuations or other services such as earthquakes, accidents, etc. other than what is provided through the Exploratorium's current methodology.

These considerations are critical to addressing this factor of the Four Factor Analysis.

(ii) **Recommendation:**

The Museum should address the nature and importance of its programs and services in its written Four Factor Analysis. This factor should include a discussion of all of the Museum's exhibits and displays and an assessment as to which ones require additional efforts to ensure that LEP individuals have meaningful access to them. This factor should include an action plan for how and when the Museum will provide the needed adjustments and enhancements on an exhibit-by-exhibit basis to ensure such access. This analysis should also include language services to enhance visitor safety during visiting hours and in emergency situations.

(d) **The resources available to the grantee/recipient and costs:**

(i) **Findings of Fact:**

The Exploratorium has not identified specific funds that are dedicated to the provision of language assistance services; however, the Museum has identified the use of existing resources and dedication of time to satisfying the need for interpreter services. These efforts are reflected in the Museum's inclusion and recruitment of bilingual staff for a number of its positions. In addition, the Museum has sought additional funding through research grants and is exploring innovative and cost-effective means of enhancing its language assistance services (see "Promising Practices" below).

(ii) **Compliance Analysis:**

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. NASA Title VI LEP Guidance, Sec. V(3). Resource and cost issues, however, can often be reduced by technological advances and the sharing of language assistance materials and services among and between recipients, advocacy groups, and Federal grant agencies.

Other cost-reduction measures may include, where appropriate,

- training bilingual staff to act as interpreters and translators;
- information sharing through industry groups, telephonic and video conferencing interpretation services;
- pooling resources and standardizing documents to reduce translation needs;
- using qualified translators and interpreters to ensure that documents need not be fixed later and that inaccurate interpretations do not cause delay or other costs;
- centralizing interpreter and translator services to achieve economies of scale; or
- the formalized use of qualified community volunteers.

It appears that the Exploratorium is taking some steps to make the most cost-effective use of its funds, e.g., hiring of bilingual staff, and is undertaking innovative and cost-effective practices (see Promising Practices," below). However, an entity of the size and scope of the Exploratorium, with the number and proportion of LEP visitors it likely has, needs to take a more systematic and structured approach to the provision of LEP services. Such an approach

requires dedicated funding, among other things, to accomplish. It also requires a great deal more effort in the way of determining the extent of its obligation through a Four Factor Analysis, and the implementation of the results of that analysis in a comprehensive Language Assistance Plan.

(iii) Recommendations:

- (A) The Exploratorium should continue to carefully explore the most cost-effective means of delivering competent language services and accurate language services before limiting services due to resource concerns. This effort should be documented in the Four Factor Analysis to be conducted by the Museum.
- (B) Because the Exploratorium is a large entity serving a significant number or proportion of LEP persons, to the extent that the Museum's Four Factor Analysis calls for the Museum to limit language assistance services based on this factor, the Museum should ensure that's its resource limitations are well-substantiated within its Four Factor Analysis.

(iv) Promising Practices:

- (A) Funds to Reach out to LEP Communities. The Exploratorium submitted a recalled expenditure of \$20,000 from a grant in 2003 from the San Francisco Foundation. With those funds, it researched special programs for public programs and investigated the "better understanding" of LEP stakeholders through a set of Community Forums, Museumgoers Member focus groups, and interviews with bilingual program participants. This research resulted in targeted programs in 2004 through 2007 and are good examples of the kind of efforts called for as part of an effective Language Assistance Plan.
- (B) Research Grant Funding. It has requested funding to address needs regarding LEP by way of a National Science Foundation Grant in the amount of \$2.9 Million (Bridging the Language Barrier-June 2008).
- (C) Innovative and Cost-Effective Practices To Enhance Language Assistance Services. Exploratorium staff are investigating the use of two- dimensional bar coding and the use of a WEB interface to enhance language assistance service. The Museum staff noted that the research in this area holds potential for improved communication that goes beyond translation of hard copy guidance and instruction and may provide a less intrusive and cost-effective way to improve communication with LEP persons.

2. Effective Plan on Language Assistance for LEP Persons

(a) General Elements

(i) Findings of Fact:

A written LEP Plan provides the basis for a number of practical, "real-world" matters that a recipient must address to provide meaningful access to programs and services for LEP individuals. These include, but are not limited to, identifying LEP individuals who need

assistance, e.g., 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.

The Exploratorium does not have a formal LEP plan in place. Based on onsite interviews, the Exploratorium staff appeared generally sensitive to the needs of LEP visitors regarding the need to ensure programs and services are accessible, regardless of English proficiency. However, Exploratorium staff reiterated that the Museum's exhibits for the most part are designed as visual experiences and as such tend to obviate the need for spoken discussion and explanation, or the expectation of such by visitors.

During the onsite, NASA reviewers toured the facility from entrance to exit to experience the Museum as an Exploratorium visitor might. NASA reviewers found that upon initial entry signage displaying directions to various sites, including rest room access, is in English. At the entrance, there were brochures available to visitors as they entered the facility. All of the brochures were in English. However, there are maps of Exploratorium exhibits available at the admissions desk, which are available in German, French, Spanish, and Japanese. The availability of the maps was revealed through interviews with Exploratorium staff.

The Exploratorium's Exhibit Floor is, overall, a "hands on" or tactile experience and a discovery-oriented environment. In many instances the exhibit experience is intuitive and relies heavily on personal curiosity of a visitor, with minimal instruction on the ways to engage or interact with the exhibit. These included exhibits on one or a combination of scientific phenomena and technology, i.e., fluid mechanics, electricity, electro mechanics, astronomy, simple machines, sound mechanics, magnetic field study, optical illusions, study of visual stimuli, et al.

Exploratorium Management and staff stated that too much explanation of the exhibit was antithetical to appreciation and enjoyment of the exhibit, as the need to develop an intellectual curiosity is a part of the Exploratorium "experience." The management team further indicated that their model for the Exploratorium was to create a learning environment that was not prescriptive in the way that visitors would view and receive the exhibits. They were intent on having visitors go through the exhibits without an overly structured way to dictate the experience. The intent was to have a "hands-on" environment that encouraged independent review, examination and inquiry by its visitors.

However, there were a number of exhibits that required the participant to understand a sequence of actions that had to be followed to fully participate in and appreciate the experience offered by the exhibit. In these instances, one would depend on the oral or written instruction to participate in the experience anticipated by the creator of the exhibit. However, all instructions or directions related to an Exhibit were written in English.

During the visit to the Exploratorium, a visitor would experience areas that had been categorized for reference as film, sound graphic signage and personal assistance. These areas require the use of instruction in some instances that make it necessary that a language medium be used to communicate or navigate the movement from one exhibit to another, the

emergency needs of the LEPs, customer assistance, marketing and outreach, availability of printed materials, and the use of alternative resources for translation services.

Exploratorium staff, during interviews, stated that there were “explainers” who roamed the Exhibit floor offering assistance, and that all of them were either bi-lingual or multi-lingual, speaking languages including Italian, German, Spanish, Chinese, and Japanese. Moreover, some Exploratorium staff have individually sought to learn languages other than English on their own initiative. The focus has been on maintaining a staff presence to assist with translation services as opposed to using outside interpreters. However, there are no signs seeking to advise Exploratorium visitors of the languages for which the Exploratorium staff can provide assistance. There was no sign that indicated that the staff would be willing to translate or provide brochures in alternative languages for LEP persons.

(ii) Compliance Analysis

After completing the Four Factor Analysis and deciding what language assistance services are appropriate, a recipient should develop an implementation plan to address the identified needs of the LEP populations they serve. NASA Title VI LEP Guidance, Sec. VII. The development and maintenance of a periodically-updated written 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. Moreover, such written plans would likely provide additional benefits to a recipient’s managers in the areas of training, administration, planning, and budgeting. These benefits should lead most recipients to document in a written LAP, their language assistance services, and how staff and LEP persons can access those services.

Exploratorium management conveyed that the Museum does not heavily rely on written and oral instruction to experience their exhibits. Yet it was clear that some exhibits do indeed require some level of verbal or written instruction, and all of the written instruction and signage is provided in English.

Nonetheless, Exploratorium noted its awareness of the need to better engage LEP individuals, and it appears that the Exploratorium is aware of the need to provide assistance to ensure meaningful access for LEP visitors; for example, providing bilingual and multilingual speakers on the Exhibit floor. However, the lack of signage or informational materials in languages other than English, and the lack of means for providing notice to LEP individuals regarding available services point to the need for a Language Assistance Plan to address these matters.

(iii) Recommendation:

The Exploratorium should develop a written Language Assistance Plan (LAP) consistent with the NASA Title VI LEP Guidance. The Museum may wish to convene an internal LEP taskforce to develop the LAP. The LAP should address:

(A) Identifying LEP individuals who needs language assistance. This aspect of the LAP is directly related to the first two factors of the Four Factor Analysis. However, it requires the Exploratorium to go beyond identifying the number, proportion, and frequency of

LEP individuals' contact with the Museum to identifying specific means for Museum staff to engage directly with LEP persons who are Museum visitors. The NASA Title VI LEP Guidance notes that one 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. Such cards, for instance, might say "I speak Spanish" in both Spanish and English, "I speak Vietnamese" in both English and Vietnamese, etc. To reduce costs of compliance, the federal government has made a set of these cards available on the Internet. The Census Bureau "I speak card" can be found and downloaded at <http://www.usdoj.gov/crt/cor/13166.htm>. When records are normally kept of past interactions with members of the public, the language of the LEP person can be included as part of the record. In addition to helping employees identify the language of LEP persons they encounter, this process will help in future applications of the first two factors of the Four Factor Analysis. NASA Title VI LEP Guidance, Sec. VII(1).

(B) Taking language assistance measures. An effective LAP should include information about the ways in which language assistance will be provided. The NASA Title VI LEP Guidance suggests that recipients may want to include information on at least the following:

- Types of language services available.
- How staff can obtain those services.
- How to respond to LEP callers.
- How to respond to written communications from LEP persons.
- How to respond to LEP individuals who have in-person contact with recipient staff.
- How to ensure competency of interpreters and translation services. NASA Title VI LEP Guidance, Sec. VII(2); see also Sec. D.2(b) of this report on selecting appropriate language assistance services.

(C) Training staff. The LAP should include specific actions to ensure that Exploratorium staff know their obligations to provide meaningful access to information and services for LEP persons. An effective LAP plan would likely include training to ensure that:

- Staff know about LEP policies and procedures.
- Staff having contact with the public (or those in a recipient's custody) are trained to work effectively with in-person and telephone interpreters. NASA Title VI LEP Guidance, Sec. VII(3).

Exploratorium should include this training as part of the orientation for new employees. It is important to ensure that all employees in public contact positions are properly trained.

However, there is flexibility in how the LAP sets forth the manner in which the training is provided. The more frequent the contact with LEP persons, the greater the need will be for in-depth training. Staff with little or no contact with LEP persons may only have to be aware of a LAP.

The LAP should also include action to ensure that Exploratorium management staff, even if they do not interact regularly with LEP persons, should be fully aware of and understand the plan so they can reinforce its importance and ensure its implementation by staff.

(D) Providing Notice to LEP persons. The LAP should include specific actions to ensure that LEP persons know that the services that are available and that they are free of charge. Recipients should provide this notice in a language LEP persons will understand. Examples of actions regarding notification that Exploratorium should include in the LAP are:

- *Posting signs in initial entry areas*. When language assistance is needed to ensure meaningful access to information and services, it is important to provide notice in appropriate languages in intake areas or initial points of contact so that LEP persons can learn how to access those language services. This is particularly true in areas with high volumes of LEP persons seeking access to certain Museum exhibits and displays. For instance, signs in the Museum's entry areas should state that free language assistance is available, e.g., bilingual and multilingual staff. The signs should be translated into the most common languages encountered based on the Museum's Four Factor Analysis. In addition, posting notices in commonly encountered languages notifying LEP persons of language assistance may encourage them to self identify.
- *Stating in outreach documents that language services are available*. Announcements could be in, for instance, materials and information posted on the Museum's Website and in hard-copy, such as brochures, e.g., the NASA LEP Brochure (attached as Appendix D), booklets, and in outreach and recruitment information. These statements should be translated into the most common languages and could be placed on the front of common documents.
- *Working with community-based organizations and other stakeholders to inform LEP individuals of the recipients' services*, including the availability of language assistance services.

Exploratorium may also wish to consider the following:

- *Using a telephone voice mail menu*. The menu could be in the most common languages encountered. It should provide information about available language assistance services and how to get them.
- *Including notices in local newspapers in languages other than English*.
- *Providing notices on non-English language radio and television stations about the available language assistance services and how to get them*.
- *Presentations and/or notices at schools and religious organizations*.

(E) Monitoring and Updating the LAP. Exploratorium's LAP should include, where appropriate, a process for determining, on an ongoing basis, whether new documents, programs, services, and activities need to be made accessible for LEP individuals. Exploratorium also may want to provide notice of any changes in services to the LEP public and to employees. NASA Title VI LEP Guidance, Sec. VII(5) In addition, recipients should consider whether changes in demographics, types of services, or other needs require annual reevaluation of their LAP. Less frequent reevaluation may be more appropriate where demographics, services, and needs are more static. One good way to evaluate the LAP is to seek feedback from the community. In their review, Exploratorium may want to consider assessing changes in:

- Current LEP populations in service area or population affected or encountered.
- Frequency of encounters with LEP language groups.
- Nature and importance of activities to LEP persons.

- Availability of resources, including technological advances and sources of additional resources, and the costs imposed.
- Whether existing assistance is meeting the needs of LEP persons.
- Whether staff knows and understands the LAP and how to implement it.
- Whether identified sources for assistance are still available and viable.

(b) Selecting Language Assistance Services

(i) Findings of Fact:

One of the more critical aspects of an effective Language Assistance Plan is the determination of what language assistance services will be provided and how they will be provided, e.g., translation services.

As noted above, the Museum facility has no signage in languages other than English. Exploratorium staff acknowledged that little attention has been devoted to providing information in languages other than English in brochures and other informational materials. Nonetheless, the Museum provided a sampling of event posters and program descriptions it has developed in languages other than English.

The Museum has no formal outside relationship with an entity, e.g., contract services, to provide language assistance services. Exploratorium staff provides all translation for visitors. The Exploratorium also provided lists that identified bi-lingual and multi-lingual staff. It also demonstrated the dissemination within the Exploratorium of a list of multi-lingual staff to assist with interpretation and translation needs.

There is a miscellaneous budget for translation services to accommodate custodial staff language needs, but as the Museum informed NASA, only minimal effort has been undertaken to date to provide translation of written materials developed by the Museum, e.g., Exploratorium's Web Site, brochures, maps and press releases.

(ii) Compliance Analysis

Recipients have two main ways to provide language services: oral and written language services. Quality and accuracy of the language service is critical. NASA Title VI LEP Guidance Sec. VI.

The Exploratorium states that there is no need for written interpretation because its programs and services are narrated for visitors. However, the narration is in English only, which means that there is a potential barrier for LEP persons and a need for interpretation in other languages.

As the main need of the Exploratorium appears to be oral language services, the Museum must take steps to ensure the competency and timeliness of those services. Regarding oral language services (interpretation), NASA's Title VI LEP guidance states that where interpretation is considered needed and reasonable, recipients should provide competent interpreters in a timely manner. NASA Title VI LEP Guidance, Sec. VI(A). Competence includes demonstration of

proficiency in and ability to communicate information accurately in both English and in the other language; knowledge in both language of any specialized terms or concepts peculiar to the Museums' programs and exhibits; and an understanding and adherence to their role as interpreters. Timelines means that the language assistance is provided at a time and place that avoids denial of the Museum's services and benefits, including delay in the delivery of those services.

Regarding written materials, the NASA Title VI LEP Guidance states that after applying a Four Factor Analysis a recipient may determine that an effective Language Assistance Plan (LAP) (see Sec. II.C.3, below) includes the translation of certain written materials into the language(s) most frequently encountered. NASA Title VI LEP Guidance, Sec. VI(B). Documents considered vital for translation for the Museum might include: visitor comment forms, safety notices, and notices advising LEP persons of free language assistance, among others.

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; or if there are fewer than 50 persons in a language group that reaches the five percent trigger, the recipient does not translate vital written materials but provides 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.* NASA Title VI LEP Guidance, Sec. VI.B(a). (emphasis added).

It should also be noted in this regard that well-substantiated claims of lack of resources to translate all vital documents into dozens of languages *do not necessarily relieve the recipient of the obligation to translate those documents into at least several of the more frequently-encountered languages and to set benchmarks for continued translations, as part of its Language Assistance Plan, into the remaining languages over time.* As a result, the extent of the Exploratorium's obligations to provide written translations of documents *should be determined on a case-by-case basis, looking at the totality of the circumstances in light of the Four Factor Analysis.* NASA Title VI LEP Guidance, Sec. VI.B. (emphasis added).

Further, NASA notes that the Exploratorium's lack of written materials translated into other languages may have a negative impact for LEP persons. More specifically, lack of awareness that a particular program or service exists may effectively deny LEP individuals meaningful access. NASA Title VI LEP Guidance, Sec. VI.B. In addition, efforts to provide written materials in other languages would help to broaden outreach and accessibility for LEP communities (see Recommendations, below). Finally, the Exploratorium's efforts in determining which materials to translate should be informed by the "safe harbor" provision.

(iii) **Recommendation:**

As part of its Language Assistance Plan (see Sec. II.C.2(a)(iii), "Recommendation," above), the Exploratorium should undertake a careful review of its programs and services to determine how it will provide for oral and written language services on an ongoing basis including:

- (A) Defining the competency needed and the means of acquiring it (e.g., hiring bilingual staff, hiring staff interpreters, contracting for interpreters, use of community volunteers);
- (B) Determining which written materials should be translated, utilizing the “safe harbor” provision of NASA’s Title VI LEP Guidance as appropriate, and including regularly assessment the needs of the populations most frequently encountered or affected by the program to determine which materials and information should be translated, giving consideration to providing such information electronically, e.g., on the Museum’s website, or through use of other media, e.g., brochures, posters, to broaden the Museum’s outreach efforts to LEP persons and communities.

III. Conclusion

Based on its compliance review, NASA finds that the Exploratorium is not currently 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. While the Exploratorium has taken some steps, NASA finds that the Museum’s compliance efforts can be greatly strengthened by taking additional steps outlined in NASA’s Title VI LEP Guidance, including conducting a Four Factor Analysis and developing and implementing a Language Assistance Plan, to better ensure meaningful access to LEP individuals and communities.

To bring the Exploratorium into full voluntary compliance with NASA Title VI LEP requirements, NASA has provided a number of recommendations in this report. Taken together, these recommendations form the broad outlines of a Four Factor Analysis and LAP as called for in the NASA Title VI LEP Guidance.

In sum NASA recommends that the Museum undertake a Compliance Action Plan based on the recommendations set forth in this report to:

- 1) Conduct a Four Factor Analysis consistent with the NASA Title VI LEP Policy Guidance and recommendations contained in this report to determine the number, proportion and frequency of contact of LEP individuals, as well as the nature and importance of programs and services based on an exhibit-by-exhibit assessment, and finally the resources, costs and ways to take reasonable steps to ensure meaningful access within the parameters set by available resources, including cost-reduction measures (see “Recommendation” sections, pp. 7-11).
- 2) Incorporate the findings of the Four Factor Analysis into a multi-year Language Assistance Plan with clearly defined actions and timetables for completion (see “Recommendation” sections, pp. 13-15; pp. 17-18).
- 3) Complete the LAP including milestones for completion of all efforts within 90 days of the date of this report.

NASA stands ready to provide technical assistance the Exploratorium may requests as it develops and implements its Compliance Action Plan.