

Programmatic Environmental Assessment
**Alteration/Repair/Renovation of
Existing Healthcare and Other Facilities
(Nationwide)**

Health Resources and Services Administration

5600 Fishers Lane
Rockville, Maryland 20857

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List of Acronyms

| | |
|-------|---|
| ABFE | Advisory Base Flood Elevation |
| ACHP | Advisory Council on Historic Preservation |
| BFE | base flood elevation |
| BMP | best management practice |
| CAA | Clean Air Act |
| CIP | Capital Improvement Program |
| CWA | Clean Water Act |
| CBRA | Coastal Barrier Resources Act |
| CBRS | Coastal Barrier Resources System |
| CBU | Coastal Barrier Resources System Unit |
| CFR | Code of Federal Regulations |
| CMD | Coastal Management Division |
| CMP | Coastal Management Program |
| CUP | Coastal Use Permit |
| CZMA | Coastal Zone Management Act |
| DFIRM | digital Flood Insurance Rate Map |
| EA | environmental assessment |
| EFH | Essential Fish Habitat |
| EHR | electronic health record |
| EHP | environmental and historic preservation |
| E.O. | Executive Order |
| EPA | U.S. Environmental Protection Agency |
| ESA | Endangered Species Act |
| FIP | Federal Investment Program |
| FIRM | Flood Insurance Rate Map |
| FONSI | Finding of No Significant Impacts |
| FWS | U.S. Fish and Wildlife Service |
| FPPA | Floodplain Protection Policy Act |
| FY | fiscal year |
| GCR | General Conformity Rule |
| GIS | geographic information system |

List of Acronyms

| | |
|-------|--|
| HCC | Health Center Cluster Program New Access Points |
| HHS | Health and Human Services |
| HIT | Health information technology |
| HRSA | Health Resources and Services Administration |
| HUD | Housing and Urban Development |
| MSA | Magnuson-Stevens Fishery Conservation and Management Act |
| NEPA | National Environmental Policy Act |
| NGA | Notice of grant award |
| NHPA | National Historic Preservation Act |
| NPDES | National Pollutant Discharge Elimination System |
| NPS | National Park Service |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| NTHP | National Trust for Historic Preservation |
| OMB | Office of Management and Budget |
| PA | Programmatic Agreement |
| PEA | programmatic environmental assessment |
| POV | privately owned vehicle |
| SBA | Small Business Administration |
| SHPO | State Historic Preservation Office |
| SWPPP | Stormwater Pollution Prevention Plan |
| THPO | Tribal Historic Preservation Office |
| USACE | U.S. Army Corps of Engineers |

1 Introduction

1.1 The Programmatic Environmental Assessment (PEA)

This Programmatic Environmental Assessment (PEA) documents the results of the evaluation of the potential environmental impacts of actions proposed by the Health Resources and Services Administration (HRSA) of the Department of Health and Human Services (HHS). HRSA provides discretionary grant and cooperative agreement awards to support health centers expand their capacity to provide primary and preventive health care services to medically underserved populations nationwide. This HRSA' program provides funds for Health Care and Other Facilities (HCOF) under the *Title 2 of Consolidated Appropriations Act, 2010*, and related "Health Resources and Services" in the statement of the managers on the conference report accompanying this Act, to construct, renovate, expand, equip, or modernize health care and other related facilities.

PEAs assess the environmental effects of multiple actions and their impact in a given geographic area in order to determine the additive, synergistic, and cumulative effects of discrete activities in a development context. They may also be applied when the environmental impacts are generic or common to a class of actions, or to other activities that are not location specific. The PEA can serve as a reference document from which Supplemental or individual Environmental Assessments, which can be done more efficiently or with a better foundation because of the PEA, are spawned, typically called tiering.

This PEA has been specifically designed to evaluate one category of actions to be funded through HRSA grants, encompassing the renovation and rehabilitation of buildings and facilities to support improved services in the nation's health centers. With the PEA in place, the environmental review process required by the National Environmental Policy Act (NEPA) and its associated environmental laws will be streamlined, allowing grantees to submit an Environmental Information and Documentation Form (EID) as part of their application process. This project level environmental review will ensure there are no extraordinary circumstances that exist that are beyond the issues identified and evaluated within this document. All grant applications will be reviewed to determine if they fall within the scope of this PEA. If extraordinary circumstances are identified in the EID, a Supplemental Environmental Assessment (SEA) will be required for that action.

Extraordinary circumstances encompass the following:

- a. Unique situations presented by specific proposals, such as scientific controversy about the environmental effects of the proposal;
- b. Uncertain effects or effects involving unique or unknown risks;
- c. Unresolved conflicts concerning alternate uses of available resources within the meaning of Section 102(2)(E) of NEPA; or
- d. where it is reasonable to anticipate a cumulatively significant impact on the environment.

Other actions funded under the HCOF program (primarily equipment purchases and other administrative actions) are covered under agency categorical exclusions (CATEXs) and will not

require any additional environmental review (unless extraordinary circumstances are identified in the EID).

Finally, those projects that encompass actions beyond those covered in the PEA and which are not included as a CATEX will require an individual EA for each action. These projects primarily include new construction. In rare cases, an Environmental Impact Statement (EIS) may be required if the scope and complexity of an action has potential to create significant environmental impacts.

This PEA has been prepared pursuant to:

- The National Environmental Policy Act (NEPA) of 1969 (42 United States Code (USC) 4321 et seq.), which requires an environmental analysis for major federal Actions having the potential to impact the quality of the human environment;
- Council of Environmental Quality in 40 Code of Federal Regulations (CFR) 1500- 1508, which implement the requirements of NEPA; and
- HHS General Administration Manual Part 30, Environmental Protection

1.2 Background

Established in 1982, HRSA was created by merging the Health Services Administration and the Health Resources Administration. An agency of the Department of Health and Human Services (DHHS), HRSA's mission is to provide national leadership, program resources and services needed to improve access to culturally competent and quality health care. HRSA is the principal Federal Agency charged with increasing access to health care for those who are medically underserved. HRSA's programmatic portfolio includes a range of programs or initiatives designed to increase access to care, improve quality, and safeguard the health and well-being of the Nation's most vulnerable populations.

Through HRSA grants, funds are made available to those who meet the eligibility requirements to support health centers expand their capacity to provide primary and preventative health care services to medically underserved populations as well as create employment opportunities in underserved communities. Those eligible for HRSA grants include community health centers (CHC), migrant health centers (MHC), health care for the homeless (HCH), and public housing primary care (PHPC). Capital improvements to health care facilities are among the projects funded by HRSA grants. Examples of improvements eligible for HRSA grants are alteration/repair/renovation (including equipment), construction of a new site or expansion of an existing site, and/or acquisition of information technology equipment.

1.3 Purpose and Need for Action

HRSA has been instructed by the Congress, through the fiscal year (FY) 2010 Consolidated Appropriations Act (P.L. 111-117), to award Federal monies for HCOF construction projects to specific earmarked facilities. Under the HCOF program, more than \$2.3 billion in Federal assistance has been provided by HRSA for more than 3,000 awards every state, the District of Columbia, Puerto Rico, the U.S. Virgin Islands and U.S. possessions in the Pacific since the program began in 1998. The Federal assistance is provided to projects involving construction, renovation, design only, and equipment only. These projects tend to be for hospitals, outpatient facilities, residential care facilities, research facilities and academic facilities.

In FY 2010, HRSA anticipates about 575 earmarks receiving about \$270 million in assistance under the HCOF program. The HCOF assistance must be awarded by the end of the Federal FY (September 30, 2010). Since these are Congressional earmarks, HRSA does not have the discretion to disapprove an application if it meets minimal Federal requirements. However, no drawdown on the funds awarded can occur until the NEPA review process is completed.

2 Alternatives Including the Proposed Action

2.1 Background

HCOF grantees may use financial assistance to support one or more capital improvements in health center facilities such as:

- alteration/repair/renovation (may include equipment);
- construction of a new site or expansion of an existing site (may include equipment); and/or
- information technology (IT)/equipment purchase, including health information technology (HIT) systems and Electronic Health Record (EHR) related enhancements that are certified by an organization recognized by the Secretary of Health and Human Services (HHS).

Funds awarded through HCOF grants must be **fully obligated** by the end of the fiscal year.

Table 2-1 provides a description of the full range of eligible actions for HCOF grants:

Table 2-1. HRSA Project Types

| Project Types | Definition | Examples |
|--|---|---|
| Alteration/repair/renovation (existing facility) | <ul style="list-style-type: none"> • Work required to change the interior arrangements or other physical characteristics of an existing facility or installed equipment (does not increase square footage) • May also include equipment purchase | <ul style="list-style-type: none"> • Renovation of medical exam rooms • Installation of built-in sterilizers • Installation of uninterruptible power supply |
| Construction (new site, or expansion of existing site) | <ul style="list-style-type: none"> • Adding a new structure to an existing site that increases the total square footage of the facility • Adding structure to real property (i.e., land) • May also include equipment purchase | <ul style="list-style-type: none"> • Addition of a new wing to the health center • Building a new facility at a new site |
| IT/Equipment purchase | <ul style="list-style-type: none"> • Is an article of tangible nonexpendable personal property that has a useful life of more than 1 year and an acquisition cost of \$5,000 or more per unit or the capitalization threshold established by the recipient, whichever is less • For the purpose of the HCOF grant, this type of project includes nonexpendable supplies costing less than \$5,000 (e.g., personal computer) | <ul style="list-style-type: none"> • Purchase of generator • Purchase of computers • Telecommunication system upgrades • Upgrade or purchase of mobile van • Purchase of dental x-ray equipment • Practice management system enhancements |
| HIT purchase | <ul style="list-style-type: none"> • Includes hardware, software, integrated technologies or related licenses, intellectual property, upgrades, or | <ul style="list-style-type: none"> • Telehealth-related equipment • Registries |

2 – Alternatives Including the Proposed Action

| Project Types | Definition | Examples |
|--------------------------------|--|--|
| | packaged solutions sold as services that are designed for or support the use by health care entities or patients for the electronic creation, maintenance, access, or exchange of health information. | <ul style="list-style-type: none"> • Electronic prescribing • Enhancements necessary to interface between HIT/EHR and other electronic systems |
| Certified EHR-related purchase | <ul style="list-style-type: none"> • This term refers to computer software that providers use to track all aspects of patient care. • For HCOF, allowable costs include pre-implementation and readiness, software, infrastructure/clinical facility, data center infrastructure, and implementation staffing. | <ul style="list-style-type: none"> • Certified EHR software costs: EHR application costs, maintenance, computer-based training • Infrastructure clinical facility costs: wireless LAN infrastructure, LAN switches, tablets, desktop PCs, cameras, printers • Data infrastructure costs: servers, routers, switches, back-up software, fire suppression, cooling/HVAC, physical security, power upgrades • Implementation staffing: core team training, vendor project management, data migration, paper chart conversion, CIO, network administration |

2.2 Alternatives

In order to streamline review and approval of projects which fall within the footprint of existing buildings and which are eligible under HRSA grant programs, three alternatives have been identified for analysis in this PEA. These alternatives are the alteration/repair/renovation of interior portions of buildings, the alteration/renovation/repair of exterior portions of buildings, and the No Action Alternative.

There is no threshold on the square foot size of buildings being renovated since the existing footprint will not be changed in any of these actions. Instead, each action must be evaluated to ensure that it falls under the level of impact discussed within this document. Greater impacts than normally anticipated for an action would create the need for additional evaluation through a site-specific Environmental Assessment to determine level of significance of that impact.

These actions may apply to any existing facility, including current medical centers or buildings whose use is being changed to that of a medical center through renovations. Any changes in zoning must be evaluated to ensure no inconsistencies or conflicts with current zoning or land-use requirements.

Alternative 1 – Building Interiors: Alternative 1 includes alteration/repair/ renovation (existing facility) that entails physical alteration to *interior* portions of buildings/facilities. This may include: reconfiguration of space for new uses and rehabilitation of aging spaces (including replacement of flooring, drywall and structural components); addition or enhancement of HVAC systems; upgrade of building areas to meet special use (such as laboratories, computer equipment rooms, etc.); installation or

upgrade of power systems to meet increased capacity or to ensure uninterrupted power sources; and other interior improvements.

These actions may take place in all areas of the United States and its territories where eligible applicants for HRSA grants exist. All local, state, and federal requirements must be met in the design, construction, and operation of these facilities, including building permits, floodplain ordinances, and permits required for use and disposal of hazardous materials.

Alternative 2 – Building Exteriors: Alternative 2 includes alteration/repair/renovation (existing facility) that entails physical alteration to *exterior* portions of buildings/facilities. This may include the replacement of exterior doors and windows; repair and replacement of roofs and roofing systems; improvement to sidewalks and parking lots, including resurfacing of existing paved areas; exterior improvements to power, water, and HVAC systems; structural improvements to buildings/facilities that include exterior modifications. This category of actions does not include additions or expansions to existing structures.

These actions may take place in all areas of the United States and its territories where eligible applicants for HRSA grants exist. All local, state, and federal requirements must be met in the design, construction, and operation of these facilities, including building permits, floodplain ordinances, and permits required for use and disposal of hazardous materials.

Alternative 3 – the No Action Alternative: The alternative reflects no funding being provided to buildings/facilities through HRSA grants, with no subsequent interior or exterior building alteration/repair/renovation occurring that would require federal review of NEPA and related environmental requirements.

2.3 Comparison of Alternatives

Table 2-2 illustrates a summary of the impacts resulting from each of the three alternatives. This table was constructed using broad, programmatic impacts and is subsequently very general in its assessment of the impacts. Site-specific details will determine the extent and severity of the localized impacts in each resource area and will be identified by each grant applicant in the EID, an individual environmental review checklist required for each action.

Table 2-2. Comparison of Environmental Impacts of Alternatives

| Alternatives Considered | | | |
|-------------------------|---|--|---------------------------------------|
| Resource | Alternative 1 – Interior Renovation | Alternative Action 2- Exterior Renovation | Alternative 3 - No Action Alternative |
| Geology and Soils | Minimal potential for soils impact due to interior construction | Minor and short term potential for increase in erosion during construction | No impacts to soils |
| Air Quality | Minimal emissions from construction | Short term increase in emissions during construction | No impacts to air quality |

2 – Alternatives Including the Proposed Action

| Alternatives Considered | | | |
|---|--|--|--|
| Resource | Alternative 1 – Interior Renovation | Alternative Action 2- Exterior Renovation | Alternative 3 - No Action Alternative |
| Water Quality | Minimal impact to water quality due to interior containment | Minimal increases in erosion; minimal exposure to hazardous materials | No increases in erosion or water quality |
| Floodplains | No new construction in floodplain anticipated | No new construction in floodplain anticipated | No impact to floodplains |
| Wetlands | Unlikely to impact wetlands | Minor impacts to wetlands possible during construction | No impacts to wetlands |
| Vegetation and Wildlife | Unlikely to impact biota. | Short-term impacts to biota possible during construction | No impacts to vegetation and wildlife. |
| Cultural Resources | Minor impacts possible if building is historic. Mitigation may be required | Moderate impacts possible if building is historic. Mitigation would be required. | No impact to cultural resources |
| Socioeconomics/Environmental Justice | Positive impacts likely | Positive impacts likely | Impacts could include continued shortage of medical services |
| Traffic/Transportation | Increased traffic during construction | Increased traffic during construction | No potential for increase in traffic |
| Hazardous Materials/Waste Management | Small increase in generation of construction and operational waster | Small increase in generation of construction and operational waster | No increase in waster generated |
| Noise | Increased noise during construction | Short-term increase in noise during construction | No increase in noise |
| Land Use | No conflict due to continuation of existing use | No conflict due to continuation of existing use | No potential for conflict |

3 Environmental Analysis

Renovations to medical centers and related facilities may be undertaken in a wide variety of environments: urban areas, rural areas, tribal lands, coastal areas, mountainous areas, and so forth. It is unnecessary to discuss the programmatic impacts in such detail, as this would greatly increase the volume of the document without adding an equivalent amount of detailed impact analysis. In addition, site-specific environmental information will be evaluated at each site for each project, allowing for evaluation of unique environmental conditions or impacts.

The impact analyses have been conducted by gathering general data of the affected resource areas in relation to the implementation of the Proposed Alternatives. Using this data, potential impacts and the significance levels have been assessed. Potential mitigation measures have also been identified to minimize impact levels. The text of this PEA presents the results of this process with each resource area following the following structure:

- Geology and Soils
- Air Quality
- Water Quality
- Floodplains
- Wetlands
- Biological Resources
- Cultural Resources
- Socioeconomics
- Traffic
- Hazardous Materials and Wastes
- Noise
- Land Use

This discussion is broad and regional in nature. It does not include a complete inventory of each resource, but does provide information to characterize those resources. This section also describes the potential impacts that each alternative could have on the identified resources. When mitigation is appropriate to avoid or reduce adverse impacts, these measures are also described

3.1 Geology and Soils

3.1.1 Affected Environment

3.1.1.1 Regulatory Setting

Soil resources provide a foundation for both plant and animal communities by establishing a substrate for plant growth and vegetative cover, for forestation, for impervious ground cover, and for animal habitat and feeding. These resources are equally important in both terrestrial and aquatic environments. While there are few applicable regulations regarding soils, proper conservation principles can reduce erosion, decrease turbidity, and generally improve water quality.

One of the main tools for evaluating impacts to soils is the Farmland Protection Policy Act (FPPA) which requires Federal agencies to evaluate the effects (direct and indirect) of their activities before taking any action that could result in converting designated prime or unique farmland soils, or farmland soils of statewide and local importance for non-agricultural purposes. If an action would adversely affect farmland preservation, alternative actions that could avoid or lessen adverse effects must be considered. Determination of the level of impact on prime and unique farmland soils or farmland soils of statewide and local importance is done by the lead Federal agency (proponent), which inventories farmlands affected by the proposed action and scores the land as part of a Farmland Conversion Impact Rating (AD 1006 Form), for each alternative. In consultation with the proponent, Natural Resources Conservation Service (NRCS) completes the AD 1006 Form and determines the level of consideration for protection of farmlands that needs to occur under the FPPA (NRCS 2008).

3.1.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

The renovation of medical facilities within existing building foundations and existing footprints does not have the potential to affect geology. Area soils would likely be disturbed during construction activities within the immediate vicinity of the building.

Soil loss would occur directly from disturbance or indirectly via wind or water. To minimize soil loss, construction management would implement Best Management Practices (BMP), such as developing and implementing an erosion and sedimentation control plan, using silt fences or hay bales, re-vegetating disturbed soils, and maintaining site soil stockpiles, to prevent soils from eroding and dispersing off-site.

As sites identified for renovation have been previously disturbed and converted for medical use; this alternative is not anticipated to impact prime, unique, or important farmlands. Additionally, the renovation of medical facilities would not be expected to impact more than 1 acre of soil. Should a specific action have the potential to impact prime or unique farmland, HRSA and the applicant would determine if the proposed site is within the limits of an incorporated city or if the site contains state-listed prime, unique, or important soils. If the site is within incorporated city limits or does not contain prime, unique, or important soils, the action complies with FPPA and no further documentation is required.

Alternative 2: Exterior Alteration/repair/renovation (existing facility)

The renovation of exterior areas of a medical center would not result in significant impacts to soils. If the existing center is inadequately vegetated or drained, mitigating measures should be employed upon construction activities. Construction and renovation would create soil impacts mitigated through local regulations requiring measures such as sediment fencing, detention and retention ponds, ground meshing cover, and vegetated drainage swales. Impacts to soils from erosion and compaction will vary between regions throughout the U.S., dependent largely upon the types of soils and rainfall amounts. State and local regulations in various regions will be best tailored to the climatic requirements. Thus, after employing local mitigation measures, impacts would be non-significant. Post-construction water quality and quantity impacts are also important elements when

evaluating external alterations. Storm water Best Management Practices (BMPS) and Low Impact Development (LID) technologies may be incorporated in building updates allowing for reduced impervious surfaces and opportunities for reducing long-term runoff and related erosion impacts.

Alternative 3: No Action

This alternative does not include any HRSA funding action action. Therefore, applicants would not be required to comply with the FPPA. Alternative 3 does not have the potential to affect geology or soils within the program area.

3.2 Air Quality

3.2.1 Affected Environment

3.2.1.1 Regulatory Setting

The Clean Air Act (CAA) requires that the U.S. Environmental Protection Agency (USEPA) establish primary and secondary National Ambient Air Quality Standards (NAAQS) for air pollutants that are considered harmful to the public and environment. Primary NAAQS are established at levels necessary, with an adequate margin of safety, to protect the public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Similarly, secondary NAAQS specify the levels of air quality determined appropriate to protect the public welfare from any known or anticipated adverse effects associated with air contaminants. The pollutants for which USEPA has established ambient concentration standards are called criteria pollutants, and include ozone (O₃), particulates that have aerodynamic diameters of 10 micrometers or less (PM-10), fine particles with aerodynamic diameters less than 2.5 micrometers, (PM-2.5); carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); and lead (Pb).

The CAA also requires USEPA to assign a designation to each area of the nation regarding compliance with the NAAQS. The USEPA categorizes the level of compliance or noncompliance as follows: attainment (area currently meets the NAAQS), maintenance (area currently meets the NAAQS but has previously been out of compliance), and nonattainment (area currently does not meet the NAAQS) (USEPA 2008a).

For this Proposed Action, the relevant regulatory requirement under the conformity provisions of section 176(c) of the CAA, as amended in 1990, under which federal agencies are prohibited from engaging in, supporting in any way or providing financial assistance for, licensing or permitting, or approving, any activity which does not conform to an applicable state implementation plan under the CAA. Federal actions must be "in conformity" with whatever restrictions or limitations the state has established for air emissions necessary to attain compliance with NAAQS. Federal activities that are transit-related must meet EPA's transportation conformity rule, and all other federal activities are subject to EPA's general conformity rule. This proposed action would come under the general conformity rule, 58 FR 63214.

3 – Environmental Analysis

Since the alternatives evaluated do not fall within the categories of an advisory, emergency, or excluded activity, screening techniques are used to evaluate a project. EPA has established the protocols for a screening process to verify whether a conformity determination is necessary for both non-attainment and maintenance areas (areas which were non-attainment but are now attaining the standard).

The thresholds are referred to as de minimis criteria, and vary depending upon the pollutant. For these purposes, the term de minimis refers to, among other things, emissions that are "so small as to be negligible or insignificant." If an action is below the de minimis emission threshold, then a conformity determination is not required under the general conformity rule. The thresholds established under the general conformity rule for nonattainment and maintenance areas are 100 tons per year or less for each pollutant in order to qualify for de minimis. If the de minimis criteria are exceeded, then a conformity determination must be made pursuant to the requirements of the general conformity rule.

Modern building standards have progressed to the point where materials and design requirements address energy use. Renovation and alterations of older spaces can create substantial improvements in energy efficiency and related reduction in emissions through energy efficient design standards

3.2.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

The renovation of medical facilities within existing building foundations and existing footprints does not have the potential to affect air quality. For the construction activities grantees should ensure that all applicable state, local, and tribal regulations are followed. Based on the emissions calculated as part of these activities, it is highly unlikely that either construction or operations will approach de minimis levels and are therefore very likely to be minimal impacts to air quality. Indoor air quality is a concern, especially with sensitive populations at risk to exposure to poor air quality. Implementation of low VOC and other sustainable building practices serves to improve indoor air quality.

Some emissions will be generated during construction, but these impacts are short-term. Normal operations and the associated traffic increases will also led to some effects, but these are likely to be minimal. Lead is unlikely to be a significant impact with the virtual elimination of leaded gasoline in this country. In areas of severe ozone nonattainment, VOCs and NO_x, which are ozone precursors, are limited to de minimus levels 25 tons per year for each. (40 CFR 50).

In the long term, improvements to air quality are expected through the incorporation of energy efficient design as part of interior alterations.

Alternative 2: Exterior Alteration/repair/renovation (existing facility)

The renovation of exterior areas of a medical center would not result in impacts to air quality. For the construction phase and daily operation of the facility, grantees should ensure that all applicable state, local, and tribal regulations are followed. It is highly

unlikely that either construction or operations will approach de minimis levels and are therefore very likely to be minimal impacts to air quality. Some emissions will be generated during construction, but these impacts are short-term. Normal operations and the associated traffic increases will also lead to some effects, but these are likely to be minimal. Lead is unlikely to be a significant impact with the virtual elimination of leaded gasoline in this country. In areas of severe ozone nonattainment, VOCs and NO_x, which are ozone precursors, are limited to de minimus levels 25 tons per year for each. (40 CFR 50).

Renovations and alterations may include upgrades to certain mechanical systems and equipment, such as emergency generators, boiler plants, cooling towers, and incinerators. All permitting requirements must be followed in the design, construction and operations of these systems.

Alternative 3: No Action

This alternative does not include any HRSA funding actions. Under the No Action Alternative, traffic volumes and air quality would continue at current levels. No localized or regional effects to air quality are expected. Therefore, applicants would not be required to comply with Clean Air Act requirements.

3.3 Water Quality

3.3.1 Affected Environment

3.3.1.1 Regulatory Setting

Water is a central component of any community for both the natural and human inhabitants. The availability of water, including surface water and groundwater, and the quality of those waters, play a critical role in determining the natural community structure and in supporting human activity.

Both during construction and in post-construction facility operations, water quality and quantity impacts should be carefully evaluated and impacts mitigated where possible. Stormwater Best Management Practices (BMPS) and Low Impact Development (LID) technologies should be incorporated as part of building design and construction to reduce the impervious surfaces and associated runoff that may occur when facilities increase their footprint.

The Clean Water Act (CWA) establishes the basic structure for regulating pollutant discharges to navigable waters of the U.S. It sets forth procedures for effluent limitations, water quality standards and implementation plans, national performance standards, and point source (e.g., municipal wastewater discharges) and nonpoint source programs (e.g., stormwater). The CWA also establishes the National Pollutant Discharge Elimination System (NPDES) under Section 402 and permits for dredged or fill material under Section 404 (USEPA 2008b).

The U.S. Army Corps of Engineers (USACE) is charged with regulating the disposal of dredged and fill materials under Section 404 of the CWA. A Section 404 permit from

3 – Environmental Analysis

the USACE must be obtained for any dredge or fill activities within jurisdictional waters of the U.S. During the permit review process, the USACE determines the type of permit appropriate for the proposed action. Two types of permits are issued by the USACE: (1) General Permits, issued on a state, regional, and nationwide basis and covering a variety of activities, including minimal individual and cumulative adverse affects, and (2) Individual Permits, issued for a case-specific activity (USACE 1998).

Section 401 of the CWA specifies that states must certify that any activity subject to a permit issued by a Federal agency, such as a CWA Section 404 permit, meets all state water quality standards. Water quality certification is also necessary when a project qualifies for a General Permit, even if the activity does not need to be reported to the USACE.

The Wild and Scenic Rivers Act (WSRA) preserves selected rivers in a free-flowing condition and protects their local environments. These rivers possess outstanding scenic, recreational, geologic, fish and wildlife, historic, or cultural values.

The Coastal Zone Management Act (CZMA) of 1972 authorizes the Coastal Zone Management Program (CZMP), which is a Federal-state partnership dedicated to comprehensive management of the nation's coastal resources. By making Federal funds available, the law encourages states to preserve, protect and, where possible, restore or enhance valuable natural coastal resources, such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the fish and wildlife using those habitats. Any Federal or state agency whose activities directly affect the coastal zone must, to the maximum extent practicable, be consistent with approved state management programs. Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

Because the scope of activities for Alternative 1 occur primarily within the footprint of an existing structure, only activities such as minor vegetation clearing and soil disturbances, which may occur during the physical renovation and equipment staging in the vicinity of a medical center, could result in temporary and minor localized negative impacts to water quality from runoff associated with these activities. Clearing and vegetation removal makes soils more vulnerable to erosion, potentially affecting sediment levels in nearby water. Soil compaction from the use of heavy equipment reduces the rate of infiltration of rainwater, creating greater overland flows and increasing erosion.

Most localities will have requirements for mitigation activities during construction. The extent and type of mitigations will vary across the country, but most will be likely to contain provisions for preserving water quality. The use of filter fencing or similar best management practices including planting grasses or spreading hay on erodible surfaces and soil piles, as well as erecting fences to contain runoff and sediment would reduce or eliminate these impacts.

It is not anticipated that wetlands, streams, or other water bodies would be impacted by any actions related to interior renovation of medical centers.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

Minor, short-term impacts to the downstream surface waters may occur during the construction activities related to Alternative 2 due to soil erosion to the same extent as described for Alternative 1. Existing storm water drains and ditches located within or adjacent to the proposed project site could be removed or reconfigured to provide improved drainage (including modifications to roof design and related drainage as part of the renovation of a medical center).

It is anticipated that the alteration or exterior renovation of a medical center would impact less than 1 acre; however, should a construction site be greater than 1 acre, the site would then require a Stormwater Pollution Prevention Plan (SWPPP) as part of the NPDES permit process. The NPDES permit would identify BMPs for protection of water quality within ephemeral and perennial streams.

As with Alternative 1, to reduce impacts to the downstream surface waters, state and local authorities could implement appropriate BMPs, such as installing silt fences and revegetating bare soils as part of the permitting process. Best Management Practices (BMPS) and Low Impact Development (LID) technologies should be incorporated as part of building design and construction to reduce the impervious surfaces and associated runoff that may occur when facilities increase their footprint.

Alternative 3: No Action

This alternative does not include any HRSA action. Therefore, the applicant would not be required to comply with the CWA, CZMA, or WSRA. Alternative 3 does not have the potential to affect water quality.

3.4 Floodplains

3.4.1 Affected Environment

3.4.1.1 Regulatory Setting

Executive Order (EO) 11988 (Floodplain Management) requires Federal agencies to avoid direct or indirect support of development within the 100-year floodplain whenever there is a practicable alternative. A floodplain is defined as the lowland and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands, and including, at a minimum, that area subject to a 1 percent or greater chance of flooding in any given year. The critical action floodplain is defined as the 500-year floodplain (0.2 percent chance floodplain) (USEPA 1979). The 500-year floodplain as defined by 40 CFR 9 is an area, including the base floodplain, which is subject to inundation from a flood having a 0.2 percent chance of being equaled or exceeded in any given year.

Flood zones are land areas identified by FEMA that describe the land area in terms of its risk of flooding. A flood insurance rate map (FIRM) is a map created by the National Flood Insurance program (NFIP) for floodplain management and insurance purposes. Digital versions of these maps are called DFIRMs. A FIRM would generally show a community’s base flood elevation (BFE), flood zones, and floodplain boundaries.

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However, maps are constantly being updated due to changes in geography, construction and mitigation activities, and meteorological events.

EO 11988 requires that Federal agencies proposing activities in a 100-year floodplain must consider alternatives to avoid adverse effects and incompatible development in the floodplain. In accordance with 44 CFR Part 9, critical actions, such as the development of hazardous waste facilities, hospitals, or utility plants, must be undertaken outside of a 500-year floodplain. If no practicable alternatives exist to siting an action in the floodplain, the action must be designed to minimize potential harm to or within the floodplain. Furthermore, a notice must be publicly circulated explaining the action and the reasons for siting in the floodplain. When evaluating actions in the floodplain, FEMA applies the decision process described in 44 CFR Part 9, referred to as the Eight-Step Planning Process, to ensure that its actions are consistent with EO 11988. By its nature, the NEPA compliance process involves the same basic decision-making process as the Eight-Step Planning Process.

3.4.1.2 Existing Conditions

FEMA has developed flood maps based on a flood frequency analysis completed by FEMA that update the flood risk data with information on storms that have occurred in the past 25+ years. FEMA currently uses FIRMs to determine elevation requirements for planning and redevelopment projects. FEMA requires that communities adhere to the elevation requirements established by BFE. There are more than 19,000 communities nationwide that participate in the NFIP.

3.4.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

Under this alternative, interior renovation would occur within the footprint of existing medical centers. No new construction would be occurring within the floodplain.

Compliance with local floodplain ordinances would occur as part of the building permitting process.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

Under this alternative, exterior renovation would occur within the footprint of existing medical centers. No new construction would be occurring within the floodplain.

Compliance with local floodplain ordinances would occur as part of the building permitting process.

Alternative 3: No Action

This Alternative does not include any HRSA actions. Therefore, HRSA and the applicant would not be required to comply with EO 11998 or local floodplain ordinances. The No Action Alternative does not have the potential to affect floodplains.

3.5 Wetlands

3.5.1 Affected Environment

3.5.1.1 Regulatory Setting

Wetlands are an important component of ecosystem function and historically have been threatened by development. The US Army Corps of Engineers (USACE) is charged with protecting wetlands through the Clean Water Act (CWA) and is empowered to issue permits under the CWA for activities that may affect wetlands.

Wetlands are protected by the Clean Water Act and regulated by USACE. While development of wetlands is certainly possible, grantees should avoid sites where filling or draining of wetlands or other activities would be required. The permitting process to fill a wetland could be lengthy and is best to be avoided, assuming equivalent sites are readily available.

EO 11990 (Protection of Wetlands) requires Federal agencies to follow avoidance, mitigation, and preservation procedures with public input before proposing new construction in wetlands. As with EO 11988, the same Eight-Step Planning Process is used to evaluate the potential effects of an action on wetlands. Formal legal protection of jurisdictional wetlands is promulgated through Section 404 of the CWA. A permit from the USACE may be required if an action has the potential to affect wetlands.

There are three different types of impacts associated with wetlands:

Direct impacts result from disturbances that occur within the wetland. Common direct impacts to wetlands include filling, grading, removal of vegetation, building construction and changes in water levels and drainage patterns. Most disturbances that result in direct impacts to wetlands are controlled by State and Federal wetland regulatory programs.

Indirect impacts result from disturbances that occur in areas outside of the wetland, such as uplands, other wetlands or waterways. Common indirect impacts include influx of surface water and sediments, fragmentation of a wetland from a contiguous wetland complex, loss of recharge area, or changes in local drainage patterns. Given that most indirect impacts are beyond the authority of State and Federal wetland regulatory programs, wetland protection can be provided by a watershed management plan under local implementation.

Cumulative impacts are those impacts resulting from combined direct and indirect impacts to the wetland over time.

3.5.1.2 Existing Conditions

The National Wetlands Inventory (NWI) is a resource provided by the USFWS which provides wetland information by digital data files to allow for identification of mapped wetland areas. Field surveys may also be necessary if areas exist which have not been mapped or which have been recently created by hydrologic changes.

3.5.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

Existing facilities would undergo minor, interior renovations, with minimal external impacts to wetlands. Care would need to be taken in the storage and parking of equipment and materials uses in the interior renovation to ensure no impacts occur to wetlands near or adjacent to a project site.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

Impacts under this alternative are likely to be minimal due to isolated construction. Any external ground disturbance (paving or installation of new underground utilities) and related land clearing and preparation will need to avoid any wetlands areas.

An action would cause a significant impact if the soil structure, hydrology (the water related features) or the vegetation of more than ¼ acre (1/10 ha) of a wetland would be altered, or a floodplain area is altered enough to present a reasonable flood danger to the area, causes the degradation or loss of habitat for populations indigenous to the floodplain area, or prohibits farming activities.

Alternative 3: No Action

The No Action alternative does not include any HRSA actions. Therefore this alternative does not have the potential to affect wetlands or waters of the U.S.

3.6 Biological Resources

3.6.1 Affected Environment

3.6.1.1 Regulatory Setting

Biological resources comprise naturally occurring and cultivated vegetative species and domestic and wild animal species and their habitats. Sensitive biological resources include plant and animal species listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act (ESA) or by a state agency pursuant to state law or regulation. Sensitive species also include species identified by the USFWS as candidates for possible listing as threatened or endangered pursuant to the ESA. Biological resources also include wetlands, which are important because they provide essential breeding, spawning, nesting, and wintering habitats for a major portion of the nation's fish and wildlife species.

The Endangered Species Act (ESA) establishes a Federal mandate to conserve, protect, and restore threatened and endangered plants and animals and their habitats. Section 7 of the ESA mandates that all Federal agencies must ensure that any action authorized, funded, or implemented is not likely to jeopardize the continued existence of a threatened or endangered species or result in the destruction of critical habitat for these species. To accomplish this, Federal agencies must consult with the USFWS or the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NOAA Fisheries) when taking action that has the potential to affect species listed as endangered or threatened or proposed for threatened or endangered listing.

The Migratory Bird Treaty Act (MBTA) makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird species listed in 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandoning eggs or young) may be considered a take, and is potentially punishable by fines and/or imprisonment. If an action is determined to cause a potential take of migratory birds, as described above, then a consultation process with the USFWS needs to be initiated to determine measures to minimize or avoid these impacts. This consultation should start as an informal process.

The Magnuson-Stevens Fishery Conservation and Management Act (as amended), also known as the Sustainable Fisheries Act, requires all Federal agencies to consult with the NOAA Fisheries on activities or proposed activities authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat (EFH). The EFH provisions of the Sustainable Fisheries Act are designed to protect fisheries habitat from being lost due to disturbance and degradation.

3.6.1.2 Existing Conditions

Plant and animal communities are an integral part of any ecosystem. Beginning with lower organisms and building upwards through the food chain, humans depend on these communities for resources such as food, shelter, and aesthetic values. There can be numerous regulatory requirements involved when a Proposed Action has impacts upon vegetation and wildlife, including The Endangered Species Act (ESA) of 1973 and The Fish and Wildlife Coordination Act (FWCA) of 1934. These laws provide a framework for conservation of vegetative and wildlife resources and can be supplemented with sound conservation principles to minimize impacts to these communities.

3.6.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

Renovating interior portions of medical centers on an existing building's footprint does not have the potential to affect sensitive biological resources.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

Renovating exterior portions of medical centers on the previous building's footprint does not have the potential to affect sensitive biological resources. However, where possible, creative landscaping can provide habitat to local species.

Alternative 3: No Action

This alternative does not include any HRSA funding action. Therefore, HRSA and the applicant would not be required to consult with USFWS, NOAA Fisheries, or state resource agencies to comply with the ESA, MBTA, or the Sustainable Fisheries Act. The No Action Alternative does not have the potential to affect sensitive biological resources.

3.7 Cultural Resources

3.7.1 Affected Environment

Cultural resources include evidence of the past activities and accomplishments of people. They include buildings, objects, locations, and structures that have scientific, historic or cultural value. Cultural resources provide cultural, educational, aesthetic, inspirational, and/or economic value and give a sense of orientation to the nation. Cultural resources are protected under a number of federal laws and regulations, as well as numerous specific state statutes.

3.7.1.1 Regulatory Setting

Section 106 of the National Historic Preservation Act (NHPA), as amended, and implemented by 36 CFR Part 800, requires Federal agencies to consider the effects of their actions on historic properties, and provide the State Historic Preservation Officer(s) (SHPO) and the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on Federal projects that would have an effect on historic properties prior to implementation. Historic properties are defined as archaeological sites, standing structures, or other historic resources listed in or eligible for listing in the National Register of Historic Places (NRHP).

Under the Council's regulations, applicants for funding may initiate the Section 106 compliance consultations when authorized to do so by the federal agency by a Programmatic Agreement between ACHP, federal agency, and SHPO. The federal agency must notify the involved SHPO's and Tribal Historic Preservation Officers (THPOs), and other consulting parties that the applicant will be so authorized. The federal agency remains legally responsible for all findings and determinations made on its behalf. HRSA has coordinated with the ACHP to authorize applicants to initiate consultation with SHPO as part of its project review process. When historic resources are identified in the project's Area of Potential Effect (APE), consultation should also occur with any persons or organizations that could be interested in the cultural resources that could be impacted by the project (such as local community groups or historic preservation organizations, or tribes with historic association with the cultural resources).

The consultative process required under the regulations aims at resolving two key issues. The first is whether the proposed project has an effect on historic properties. The term effect is defined under 36 CFR 800. 16(i) as an "alteration to the characteristics of historic property qualifying it for inclusion in, or eligibility for the National Register (of Historic Places)." The project's impact on the property's use, character, location, and setting are to be considered when determining its effect on the historic property. The other issue is whether any effect on the historic property is adverse. An effect is considered adverse under 36 CFR 800.5(a)(I) when it will endanger those qualities that make the property eligible for inclusion in the National Register of Historic Places.

Where it is determined that the an action on a building to be renovated using HRSA grant monies will have an adverse effect on a historic property, HRSA staff will continue the consultation process as provided under 36 CFR 800.6 and seek to develop either a Memorandum of Agreement or a Programmatic Agreement on the steps necessary to

avoid, minimize or mitigate adverse effects. In cases where the consultation is terminated without an agreement to resolve adverse effects, HRSA will follow the applicable requirements of 36 CFR 800.

The renovation of medical centers on tribal lands would require consultation with tribal entities such as the Tribal Historic Preservation Officer, if one has been appointed. On tribal lands, additional concerns arise including protection of burial sites, and the protection of traditional cultural places.

HRSA has provided the Advisory Council a definition of its undertakings related to these actions as follows: 1) all new construction and expansion projects; 2) alteration and renovation projects where exterior changes to the building façade or surroundings may be made (including roof, windows, and parking lots), and 3) where interior renovations may be made to a building that is over 50 years old, or is historically, architecturally, or culturally significant.

3.7.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

An impact would be adverse if an effect on a historic property may directly or indirectly alter any of the characteristics of the property that qualify it for inclusion in the National Register in a manner that would diminish the integrity of the property: location, design, setting, materials, workmanship, feeling or association (as set forth in 36 CFR 800.5(a)(1)).

The applicant will do an initial screening and consultation with the SHPO/THPO and other parties with interest in cultural resources to determine if the proposed undertaking would have an adverse effect on a historic property. The screening of the property by the applicant will include key information such as the date of construction, whether the building is listed on and national or state historic registers, and any other issues that may determine that the building is historic.

Since all renovation work for this alternative is taking place within the existing building, this alternative would not involve ground-disturbing activities below previously disturbed soil depths. Thus, there is minimal potential to affect subsurface cultural resources.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

Impacts under this Alternative are more likely since the alterations and renovations of the building will be to the exterior of the buildings and would be more likely to adversely affect a historic resource. As with Alternative 1, the applicant will do an initial screening and consultation with the SHPO/ THPO and other parties with interest in cultural resources to determine if the proposed undertaking would have an adverse effect on a historic property. The screening of the property by the applicant will include key information such as the date of construction, whether the building is listed on national or state historic registers, and any other issues that may determine that the building is historic.

Since some renovation work may include improvements to exterior areas such as paved parking lots and utility connections, this alternative could involve ground-disturbing activities below previously disturbed soil depths. Thus, there is some potential to affect

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subsurface cultural resources. Descriptions of these actions should be included in consultation with the SHPO/THPO and other parties with interest in cultural resources to ensure there is no presence of below ground archaeological resources.

Alternative 3: No Action

This alternative does not include any HRSA undertaking. Therefore, no cultural resource review would be required of HRSA or the applicant under Section 106 of the NHPA.

3.8 Socioeconomics

3.8.1 Affected Environment

3.8.1.1 Regulatory Setting

One of the key federal mechanisms for evaluating socioeconomic impacts of its actions is through EO 12898 (Federal Actions to Address Environmental Justice in Minority and Low- Income Populations) that requires Federal lead agencies to ensure rights established under Title VI of the Civil Rights Act of 1964 when analyzing environmental effects.

HRSA and most Federal lead agencies determine impacts on low-income and minority communities as part of the NEPA compliance process. Agencies are required to identify and correct programs, policies, and activities that have disproportionately high and adverse human health or environmental effects on minority or low-income populations. EO 12898 also tasks Federal agencies with ensuring that public notifications regarding environmental issues are concise, understandable, and readily accessible.

EO 13045 (Protection of Children from Environmental Health Risks and Safety Risks) requires Federal agencies to identify and assess health risks and safety risks that may disproportionately affect children. As with EO 12898, HRSA and most Federal lead agencies determine impacts on children as part of the NEPA compliance process.

3.8.1.2 Existing Conditions

By its very nature, the HRSA grants described and evaluated within this programmatic EA serve to provide additional medical services to individuals and families in need. The grant criteria reflect an evaluation of the populations served through physical and program improvements provided by these grants. Subsequently, the location of the medical centers receiving grant funds are often in areas predominantly made up of low-income and minority populations to more effectively serve their needs.

3.8.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/renovation (existing facility)

Implementation of Alternative 1 would result in beneficial impacts to both individuals requiring medical services and local contractors that perform site work and construction services for the grantee.

Short-term impacts that may occur would include loss/reduction of services during the period of construction. Temporary services provision should be establish to minimize this impact

Alternative 2: Exterior Alteration/repair/renovation (existing facility)

Similar to Alternative 1, implementation of Alternative 2 would result in beneficial impacts to both individuals requiring medical services and local contractors that perform site work/construction services for the grantee.

Short-term impacts that may occur would include loss/reduction of services during the period of construction. Temporary services provision should be established to minimize this impact

Alternative 3: No Action

Although there is no requirement for compliance with EOs 12898 and 13045 when there are no Federal actions, the No Action Alternative would likely result in disproportionate health and safety risks to low-income and minority persons and to children, as these groups would be most likely to be affected by the lack of improved medical services.

3.9 Traffic and Transportation

3.9.1 Affected Environment

3.9.1.1 Regulatory Setting

State Departments of Transportation are generally responsible for the design, construction, and maintenance of their state highway systems, as well as the portion of the Federal highways and interstates within their boundaries. Arterials, connectors, rural roads, and local roads are constructed and maintained by county or city governments.

3.9.1.2 Existing Conditions

Potential impacts could occur where program-related traffic is introduced onto roads not previously experiencing its associated volumes. Whether a medical center has been renovated or newly constructed, the traffic generated from the operation of the center could impact the local road network. However, the level of impact will differ. Centers relying upon primarily single automobile transportation of patients in the mornings and afternoons may experience heavier volumes and waiting times on roads surrounding the center. Centers in urban areas, where public transportation or walking are more feasible options, would experience less potential congestion or delays from automobile traffic. Similar to this scenario is a center that utilizes bus transportation for its patients. The lack of automobiles would result in less delay around the center. While these levels would differ, they would be likely to remain negligible and non-significant.

3.9.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

Refurbishing existing facilities could result in short-term increased traffic volumes associated with site preparation, and renovation of interior spaces. To minimize adverse impacts on traffic resulting from construction equipment, traffic along adjacent roadways would be temporarily rerouted as necessary during construction, traffic lane closures would be coordinated with the appropriate local government, equipment staging and

worker POV would be sited to hinder the traffic flow as little as possible in the areas where the actions are implemented, and adjacent residential neighborhoods and commercial/industrial areas would be notified in advance of construction activities and any rerouting of local traffic.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

As with Alternative 1, Refurbishing existing facilities could result in short-term increased traffic volumes associated with site preparation, and renovation of exterior portions of the facility (including parking and entrance areas). To minimize adverse impacts on traffic resulting from construction equipment, traffic along adjacent roadways would be temporarily rerouted as necessary during construction, traffic lane closures would be coordinated with the appropriate local government, equipment staging and worker privately owned vehicles (POV) would be sited to hinder the traffic flow as little as possible in the areas where the actions are implemented, and adjacent residential neighborhoods and commercial/industrial areas would be notified in advance of construction activities and any rerouting of local traffic. For long-term impacts, consideration should occur due to potential long-term traffic and parking requirements resulting from increased employees and patients. This should be evaluated as part of the information addressed in the EID.

Alternative 3: No Action

Under this alternative, traffic volumes would not change since there would be no increase in construction activities.

3.10 Solid and Hazardous Materials and Waste

3.10.1 Affected Environment

3.10.1.1 Regulatory Setting

Solid and hazardous materials and wastes are regulated in the U.S. under a variety of Federal and state laws. Federal laws and subsequent regulations governing the assessment, transportation, and disposal of hazardous wastes and materials include the Resource Conservation and Recovery Act (RCRA); the RCRA Hazardous and Solid Waste Amendments; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Solid Waste Act; the Toxic Substances Control Act (TSCA); and the CAA. RCRA is the Federal law that regulates hazardous waste from “cradle to grave,” that is, from the time the waste is generated through its management, storage, transport, treatment, and final disposal. USEPA is responsible for implementing this law

RCRA also sets forth a framework for the management of non-hazardous wastes. The 1986 amendments to RCRA enable the USEPA through relevant state agencies to address the environmental problems that can result from underground tanks storing petroleum and hazardous substances. RCRA focuses only on active and proposed facilities, and does not address abandoned or historical sites.

Previous uses of a medical center site may have included activities that generated hazardous waste. Some key examples may include the presence of leaking underground

fuel or chemical storage tanks, abandoned chemicals (from laboratory/photo processing/industrial cleaning), medical waste and sharps, or residuals from hazardous materials incidents such as mercury spills in plumbing and under flooring and casework, disposal of lamp ballast and mercury lamps, and areas contaminated with PCBs from old transformers. These types of environmental site issues would require a thorough review by an environmental professional and the completion of appropriate Environmental Site Assessments (ESAs) in accordance with ASTM standards.

It is anticipated that for buildings constructed before 1978, materials such as asbestos and lead based paint may be present. For renovations and alternations of older buildings, all federal, state, and local requirements must be followed in the removal, abatement, and disposal of these materials to ensure exposure is minimized. If the proper procedures are followed during renovation, it is not anticipated that additional reviews under NEPA would be required.

3.10.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/renovation (existing facility)

Interior alternations, repairs, and renovations have the potential to generate solid waste through removal of structural and finish building components. Reuse and recycling of solid waste will reduce the impact associated with disposal of wastes generated during construction.

During interior renovations there is potential to expose or otherwise affect hazardous wastes or materials typically found in buildings. This may depend on the date of construction and condition of the existing facility; any hazardous materials discovered, generated, or used during renovation would be disposed of and handled in accordance with applicable local, state, and Federal regulations. The applicant would conduct a site investigation in project areas where hazardous materials are suspected or known to be existing on or adjacent to the proposed project area. HRSA and the applicant would coordinate with state and local agencies, and USEPA, on any findings, as appropriate, with results documented in the project's administrative record.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

As with interior renovations, exterior alterations, repairs, and renovations have the potential to generate solid waste through removal of structural and finish building components. Reuse and recycling of solid waste will reduce the impact associated with disposal of wastes generated during construction.

During exterior renovations, minor ground disturbing activities could expose or otherwise affect subsurface hazardous wastes or materials; any hazardous materials discovered, generated, or used during renovation would be disposed of and handled in accordance with applicable local, state, and Federal regulations. The applicant would conduct a site investigation on project areas where hazardous materials are suspected or known to be existing on or adjacent to the proposed project area. HRSA and the applicant would coordinate with state and local agencies, and USEPA, on any findings, as appropriate, and results would be documented in the project's administrative record.

Alternative 3: No Action

Alternative 3 would not actively use hazardous materials or generate solid or hazardous wastes; therefore no impact to this resource is anticipated.

3.11 Noise

3.11.1 Affected Environment

3.11.1.1 Regulatory Setting

Noise can be disruptive to normal activities for people and wildlife. In extreme cases, it can have adverse health effects, such as hearing loss. The location, duration, timing, and frequency of activity give rise to a pattern of noise. The loudness is measured in units called decibels (dB). The loudness of sound as heard by the human ear is measured on the A-weighted decibel (dBA) scale.

Certain land uses, facilities, and the people associated with them are more sensitive to a given level of noise than other uses. Such "sensitive receptors" include schools, churches, hospitals, retirement homes, campgrounds, wilderness areas, hiking trails, and some species of threatened or endangered wildlife.

Machinery and activities during construction and renovation can generate noise. However, construction sites of this size typically do not generate noise levels greater than 90 dBA, and elevated noise levels would be likely to be of short duration. Heavy equipment use tends to be the noisiest phase of construction, but lasts only a short time.

State, local, and tribal regulations will be likely to govern noise levels for normal, day-to-day operations. Traffic generated by the facility and routine machinery or procedures such as lawn mowing may generate noise. Grantees should ensure compliance with any applicable statutes.

3.11.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

Impacts under Alternative 1 are likely to be short term and minor in duration and associated primarily with the physical renovation work. Since construction activity will be more highly restricted to internal areas, noise generation will be minimized to potential sensitive receptors.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

Impacts under Alternative 2 are likely to be short term and minor in duration and associated primarily with the physical renovation work as in Alternative 1, but may be more intense by the nature of construction and renovations occurring in outdoor areas. All work will need to strictly follow local noise ordinances to minimize potential impacts to local areas.

Alternative 3: No Action

There will be no physical actions occurring with Alternative 3, so no noise generation will occur.

3.12 Land Use

3.12.1 Affected Environment

3.12.1.1 Regulatory Setting

Land use patterns within communities aid in forming the structure of our built environment. The relationships of land uses to one another can result in community harmony or discord. Local, state, and tribal land use plans exist in many areas of the country, guiding future land use patterns based upon the vision of the local community and leaders. Federal plans govern uses of federal lands and do not have jurisdiction over local decisions.

3.12.2 Environmental Consequences and Mitigation Measures

Alternative 1: Interior Alteration/repair/ renovation (existing facility)

Alteration of existing medical centers for continued medical use would be consistent with current land use plans in place in communities and with other applicable planning and zoning requirements. With no change in land use, no impacts are anticipated in this area from Alternative 1.

Any zoning changes that would be necessary for the implementation of a project must be reviewed for consistency with existing and surrounding zoning and land-use requirements.

Alternative 2: Exterior Alteration/repair/ renovation (existing facility)

As with Alternative 1, alteration of existing medical centers for continued medical use would be consistent with current land use plans in place in communities and with other applicable planning and zoning requirements. With no change in land use, no impacts are anticipated in this area from Alternative 2.

Any zoning changes that would be necessary for the implementation of a project must be reviewed for consistency with existing and surrounding zoning and land-use requirements.

Alternative 3: No Action

The No Action Alternative would provide no funding for renovation or construction, with no potential for changing or impacting land use.

4 Cumulative Impacts

The Council on Environmental Quality's (CEQ) Regulations (40 CFR 1500-1508) implementing the procedural provisions of the National Environmental Policy Act (NEPA) of 1969, as amended (42 USC 4321) defines cumulative effects as:

"the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other action (40 CFR 1508.7)"

Incorporating the principles of cumulative effect analysis into the environmental impact assessment of an action, the following should be addressed:

- Include past, present, and future actions.
- Include all federal, nonfederal, and private actions.
- Focus on each affected resource, ecosystem, and human community.
- Focus on truly meaningful effects.

HRSA has determined that it was not feasible to evaluate program impacts in every community where facilities may be located that would be receiving funding for renovation of medical centers. It is difficult to ascertain potential impacts caused by past, present or future actions when the affected environment is not well defined, such as in this PEA. The diversity of the program funding locations and the dependence upon national level guidance and state, local, and tribal regulations makes characterizing the affected environment problematic, as conditions at any particular medical facility site can vary greatly.

5 Conclusion

This PEA analyzes the environmental impacts of implementing proposed internal and external renovations for medical centers in locations throughout the United States

As illustrated in Section 3, the impacts resulting from these changes are likely to be minimal. The two Action Alternatives will generally involve some minor and typically short-term impacts relating to site design and preparation, and construction as part of renovation and rehabilitation. Implementation of State, local, and tribal requirements will mitigate many of these impacts. Additionally, many facilities to be renovated will be in neighborhoods or communities where development has already taken place or is taking place, minimizing some of the impacts associated with construction, effects to ecological resources, land use planning, and other resources areas. Finally, HRSA encourages all grantees to employ sustainable design practices which will further reduce long-term cumulative impacts.

As described above, activities relating to the implementation of any of the alternatives will have minimal adverse impacts, largely due to mitigation measures required by state, local, and tribal regulations. Activities examined under each alternative in the Programmatic EA (internal alteration/renovation of medical centers, exterior alteration/renovation of medical centers, and no action) are virtually identical to activities resulting from public and private actions occurring on a regular basis throughout the country. Considering these impacts on a nationwide scale, the cumulative effects of the medical center renovations, both internal and external, will be minimal.

6 Mitigation Summary

Table 6-1 outlines mitigation measures that may be required in the process of renovating internal and external portions of medical centers:

Table 6-1.Mitigation Summary

| Potential Impact | Mitigation Measure |
|--|---|
| Impacts to Water Quality | Follow all state, local, and tribal regulations regarding runoff, erosion, and construction management (BMPs) employ Low Impact Development design, focus on landscape solutions |
| Impacts to Air Quality | Follow all state, local, and tribal regulations regarding construction and operational emissions. Low VOC materials and energy efficient design. |
| Increased Noise Generation | Maintain normal daylight hours for construction. Noise restrictions are generally more stringent at night and on weekends. Comply with state, local, and tribal noise regulations. |
| Impact on Surrounding Land Uses | Ensure compliance with local land use, zoning and comprehensive plans, as well as related permit processes and ordinances |
| Traffic Delays and Congestion During Construction and Operation | Utilize flaggers on busy roads during construction. Carefully stage equipment and construction worker's cars during construction. |
| Impacts to Solid and Hazardous Materials and Wastes | If hazardous materials are present or likely, ensure appropriate studies are undertaken to identify location, type, and extent of hazard. Based on results of studies, ensure hazardous materials are dealt with in accordance with federal, state, and local requirements. |
| Impacts to Soil | Follow all state, local, and tribal regulations related to soil conservation and runoff (such as implementation of BMPS to reduce erosion during construction). |
| Impacts to Vegetation and Wildlife | Most medical centers are located in developed areas, so impacts to critical habitat are unlikely. Impacts to any undisturbed natural areas are to be avoided. |
| Impacts to Wetlands | Avoid any disturbance to wetlands or waters of the U.S. |
| Impact on Historic Qualities or setting of site and/or adjacent site | Ensure compliance with Section 106 requirements for any buildings greater than 50 years old, or buildings less than 50 years old where significant events may have taken place (i.e. first successful heart transplant or a past President was treated here, etc.). Identify potential for below ground cultural resources prior to ground disturbing activities. |
| Impacts on Socioeconomics | Impacts for the action alternatives are expected to be positive |
| Impacts on Environmental Justice | Impacts for the action alternatives are expected to be positive |

7 References

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8 Glossary

Affected Environment – The region of the impact area. Can include: society as a whole, the public health or safety, and the affected interests; the environment; ecologically critical areas; endangered or threatened species; cultural/historical resources; cumulative impacts; objects listed on the National Register of Historic Places.

Building Permit – A written authorization to an applicant for a specific project allowing him to proceed with construction; granted by the authorized agency, a tribe, or local municipality, having jurisdiction after plans have been filed and reviewed.

Building Restoration – The accurate reestablishment of the form and details of a building, its artifacts, and the site on which it is located, usually as it appeared at a particular time.

Community – People having common rights, privileges, or interests, or living in the same place under the same laws and regulations.

Construction – All the on-site work done in building or altering structures, from land clearance through completion, including excavation, erection, and the assembly and installation of components and equipment.

Cultural Resource – Remains or records of districts, sites, structures, buildings, neighborhoods, objects, and events from the past; may be historic, prehistoric, archeological, or architectural in nature; cultural resources include historic properties as defined by the National Historic Preservation Act, but also include other tangible and intangible resources such as traditional cultural places and practices, folkways, traditions, landscapes, etc.

Cumulative Impacts – Impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Effects resulting from individually minor but collectively significant actions taking place over a period of time.

Design – To compose a plan for a building. The architectural concept of a building as represented by plans, elevations, renderings, and other drawings.

Environmental Assessment (EA) – A document which provides sufficient information on potential environmental effects of the proposed action and, if appropriate, its alternatives, for determining whether to prepare an Environmental Impact Statement or a Finding of No Significance (40 CFR 1508.9).

Environmental Justice – Fair treatment of all races, cultures, incomes, and educational levels with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies, fair treatment implies that no population of people should be forced to shoulder a disproportionate share of the negative environmental impacts of pollution or environmental hazards due to a lack of political or economic strength levels.

Erosion – The wearing down or washing away of soil and land surface by the action of water, wind, or ice.

Facility – An individual, grass-roots level Head Start program in a locality or neighborhood.

Finding of No Significant Impact (FONSI) – A brief summary document prepared for a proposed action, not categorically excluded, for which an Environmental Impact Statement will not be prepared (40 CFR 1508.13).

Grantee – An applicant, often a non-profit and community action agency, requesting entry to the Head Start program.

Hydrology – The applied science concerned with the waters of the earth, their occurrences, distribution, and circulation through the unending hydrologic cycle (precipitation, consequent runoff, infiltration, and storage; evaporation; and condensation). In the context of this document, it refers to the overland and subsurface movement of water.

Land Use – The way in which real property is utilized. Examples of land uses include commercial, industrial, residential, or wilderness designations.

Mitigation Measures – Methods or actions to reduce or eliminate adverse program impacts.

No Action Alternative – An alternative to a proposed action that would maintain the status quo.

Ordinance – A law or rule adopted by a local governmental authority.

Programmatic Environmental Assessment (PEA) – An Environmental Assessment describing a large scale (often regional or nationwide) program or activity. A programmatic document frequently will not address site-specific details about the Proposed Action, as the level of detail is considerable.

Property – Any asset, real or personal.

Proposed Action – A desired activity that could potentially change the existing characteristics of the affected environment.

Significant – A measure of the context and intensity of an impact. Context analysis refers to society as a whole, the affected region (of the impact area), the affected interests, and the locality. Intensity refers to the severity of impact. Intensity can be based on: benefit to the environment; effects to public health or safety; proximity to cultural/historical resources, or other ecologically critical areas; public controversy; risk to humans; connection to future project impacts; connection with cumulative impacts; effects to objects listed on the National Register of Historic Places; threat to endangered or threatened species; or violation of a State or local environmental protection law.

Site – An area or plot of ground with defined limits on which a building or project is located or proposed to be located.

Wetland – Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and other similar areas.

9 Environmental Information and Documentation Form (EID)

A blank EID form is available for download at

<http://www.hrsa.gov/hcofconstruction/nationalhistpreservationactreq.htm>