

FINAL

Insular ABC's Phase 3 Training and Sustainability Program Framework Plan

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American Samoa
Department of Education



Commonwealth of the Northern Mariana Islands
PUBLIC SCHOOL SYSTEM
STUDENTS FIRST



**GUAM DEPARTMENT
OF EDUCATION**



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About the Insular ABCs Initiative

The initiative is a multi-phase partnership between the US Department of Interior’s Office of Insular Affairs (OIA) and the Governors of the US Insular Areas (Guam, Commonwealth of Northern Marianas, American Samoa and the US Virgin Islands). The initiative is being managed by the US Army Corps of Engineers. The initiative is focused on two objectives: (1) improving the physical condition of the US Insular Area Public Schools and (2) to support capacity building initiatives to manage the school facilities. Actions to address Objective (1) are well underway as described in the Year One report (<http://hhfplanners.com>). The Training and Sustainability Program (TSP), described in the following pages, is one of OIA’s major initiatives supporting Objective (2) and will require a close collaboration with the Governors, school district leaders and facility managers to succeed.

Training and Sustainability Program Framework Plan

1. Preface

This Training and Sustainability Program (TSP) Framework Plan articulates a clear path to achieving sustainable¹ school facilities management. The TSP framework provides the background and rationale for the development and deployment of a series of training and sustainability initiatives focused on building local school facility management capacity.

The TSP is focused on raising awareness of the long-term value of effectively operated, sized, and funded territorial maintenance and repair (M&R) programs and helping school facility managers put these concepts into practice. Related topics include the role of school facility planning, programming and budgeting, building local technical and vocational skills capacity, and practicing essential job site safety awareness related to school facility repair, maintenance, and construction. The long-term success of the TSP is highly dependent on the level of local participation. The ABCs Team, led by the local HHF Program Managers (PMs) and including locally embedded personnel (the embedded team personnel hired by HHF Planners to oversee Phase 3 efforts), will provide facilitation and leadership at a programmatic level, while host and sister agencies, vocational/technical training organizations, and private sector engagement is essential for success.

Capacity building activities, such as those that maximize the use of or expand existing resources, are essential to help facility managers operate as efficiently as possible to maximize use of limited funds, as well as to provide training on facility standards, construction, and maintenance techniques including permitting and regulatory compliance. A major component of the TSP

The Training and Sustainability Program Framework Plan provides the background and rationale for the development and deployment of a series of training and sustainability initiatives focused on building local school facility management capacity.

The TSP focuses on the long-term value of maintenance and repair (M&R) programs that are effectively:

- operated
- sized
- funded

Related topics include:

- school facility planning, programming, & budgeting
- building local technical & vocational skills capacity
- Ongoing maintenance & job site safety

¹ *Organizational sustainability is the ability for an organization to sustain enduring business processes, institutional policies and practices, and historical knowledge. Organizational sustainability provides institutional continuity that extends beyond individuals so that as people come and go from an organization it continues to thrive through established processes and sound resource management (Pena, 2013).*

efforts to build local capacity is the development and deployment of the Enterprise Asset Management System (EAMS), for which the ABCs Team will collaborate and train local staff to provide:

- Basic EAMS system understanding
- Required procedures for work order management and documentation
- Steps for creating building and site assets for system updates and data entry
- Analysis required for regular facility data reporting
- Maintenance, repair, replacement scheduling and budgeting
- Life cycle cost analysis as well as maintenance and capital renewal budgeting techniques

The ABCs Team will also continue efforts to coordinate with Territory facility managers and potential EAMS users to keep them informed of system use as modules are deployed. Regular meetings will be held to build understanding of and confidence in the system, as well as to encourage effective system use.

General TSP Process Diagram/Deliverables



With regard to building the capacity of local technical skills, the Team will reach out to and seek to collaborate with existing education service providers such as vocational and technical schools, contractors' associations, and other organizations, to provide regular education and training opportunities for all levels of the ABCs' stakeholders. The plan will also address a schedule to transition Deferred Maintenance Reduction Program (DMRP) execution responsibility to the local government over the course of the four-year program.

2. Purpose and Need

2.1. Background

Assisting the territories with developing a sustainable and appropriately funded school M&R program is a major priority of the Office of Insular Affairs (OIA). Hallmarks of a sustainable program include qualified and motivated staff, an annual budget based on a scientifically derived preventative maintenance program, a well trained workforce, clear M&R program standards compliant with regulatory guidance, and information technology to provide data-driven support for managers, administrators, and elected leaders.

The ABCs Phase 1 report (<http://hhfplanners.com>) noted institutional funding and M&R program concerns starting with the need to establish and maintain a comprehensive and functional school facilities inventory, then the need to provide tools for bolstering facility management practices (e.g., detailed M&R tracking and long range school facility CIP planning). These concerns spoke to the need for establishing industry-standard school maintenance programs, essential for maximizing service lives of school facilities and minimizing overall life cycle cost. Addressing these issues in the ABCs program was considered important for long term, systemic improvements.

OIA established two major objectives for Phase 3: to reduce the amount of deferred maintenance (DM) projects² starting with the highest priority projects, and to build local capacity to prevent the DM backlog from re-occurring. The DM backlog occurred due to a lapse in the territory's ability to support an adequately funded repair and maintenance program resulting from a lack of funding, limitations of existing practices, and higher priorities for public funds.

The TSP was conceived to provide an important framework for building capacity, essential to enhance facility management standards and design and construction techniques, as well as to promote systemic change where best practices can be employed.

2.2. Needs Identified in Site and Facility Condition Assessments

Phase 2 of the ABCs initiative involved a comprehensive inspection of the insular schools and it identified several concerns that were common throughout the territories. Due to the extremely harsh tropical conditions experienced in the territories, buildings age faster than in the continental US and require an added level of M&R funding to keep them functioning. The remoteness of the territories means access to appropriate building materials and technical support are more costly and logistically challenging. M&R funding, typically near the bottom of most school district priorities, is particularly problematic in territories due to their fiscal challenges and competing government priorities.

The ABCs school inspection team reported a general need for greater oversight during project design, bidding, and execution to ensure appropriate materials and installation specifications are met—particularly for roofing replacement and other repairs to building exterior enclosures. Also found, was the need for preventative maintenance of structural components (e.g., concrete, metal) excessively worn from continued exposure to harsh coastal elements. In other cases, the need for clear maintenance requirements, schedules, and accountability was evident (e.g., air conditioning equipment, site drainage systems). Regarding site conditions, the common lack of emergency vehicle access and nearby fire hydrants was also a concern. In all cases, the need for more routine (i.e., scheduled) observation of facility components and regular maintenance or timely repairs was, and continues to be, a pressing concern. Although M&R funding adequacy will likely continue to be a challenge for school facility managers, tools for organizing information and training on more effective practices could help. A listing of common problems and territories in which they were observed is shown in Table 1.

² Deferred maintenance is defined by The Federal Accounting Standards Advisory Board (www.FASAB.gov) as: *maintenance that was not performed when it should have been or was scheduled to be and which, therefore, is put off or delayed for a future period. For purposes of this standard, maintenance is described as the act of keeping fixed assets in acceptable condition. It includes preventive maintenance, normal repairs, replacement of parts and structural components, and other activities needed to preserve the asset so that it continues to provide acceptable services and achieves its expected life. Maintenance excludes activities aimed at expanding the capacity of an asset or otherwise upgrading it to serve needs different from, or significantly greater than, those originally intended.* Statement of Federal Financial Accounting Standard 6.

Table 1 - Common Facility and Site Concerns Observed in Phase 2

<i>Element</i>	<i>AS</i>	<i>CNMI</i>	<i>Guam</i>	<i>USVI</i>
<i>Electrical</i>	X	X	X	X
<i>Fire Alarms</i>	X	X		X
<i>Concrete Spalls</i>	X	X	X	X
<i>Metal Corrosion</i>	X	X	X	X
<i>Wind/Lateral Movement Resistance</i>	X	X	X	X
<i>Roofing</i>	X	X	X	X
<i>Roof Insulation</i>	X	X	X	X
<i>Gutters</i>	X	X	X	X
<i>AC Equipment</i>	X	X	X	X
<i>Lighting Fixtures</i>	X	X	X	X
<i>Interior Moisture/Mildew</i>	X	X	X	X
<i>Sewage Backflow Prevention</i>	X	X	X	X
<i>Septic Tank Concerns</i>	X	X	X	
<i>Drainage Engineering</i>	X	X	X	X
<i>Drainage System Maintenance</i>	X	X	X	X
<i>Fire Protection At or Near Campus</i>	X	X	X	X
<i>Emergency Vehicle Access</i>	X	X	X	X

Source: Compiled from the Insular ABC's Inventory and Condition Assessment Phase II Report

Systemic change is needed to prevent the DM backlog from recurring (reducing the DM backlog without changing the underlying reason why it occurs does not meet initiative goals). OIA is committed to using available assistance programs to help the insular areas institute improvement efforts. Heightened awareness of the value of building maintenance as an important government function, on the part of insular area leaders, is also needed to sustain sound facility management.

During Phase 2, building elements were rated based on observed conditions (<http://hhfplanners.com> - Phase 2 Report, 2013). These scores were used to estimate DM and Facility Condition Index (FCI) values and were assigned weights based on estimated element costs. DM and FCI values were calculated and aggregated for all systems and buildings. Throughout all insular areas, roofing, mechanical (AC), and electrical systems were found to have the highest amount of DM. A graph with a breakdown of the DM costs by building element determined during Phase 2 is shown in Figure 1 (2013 dollars, not including grounds improvement costs).

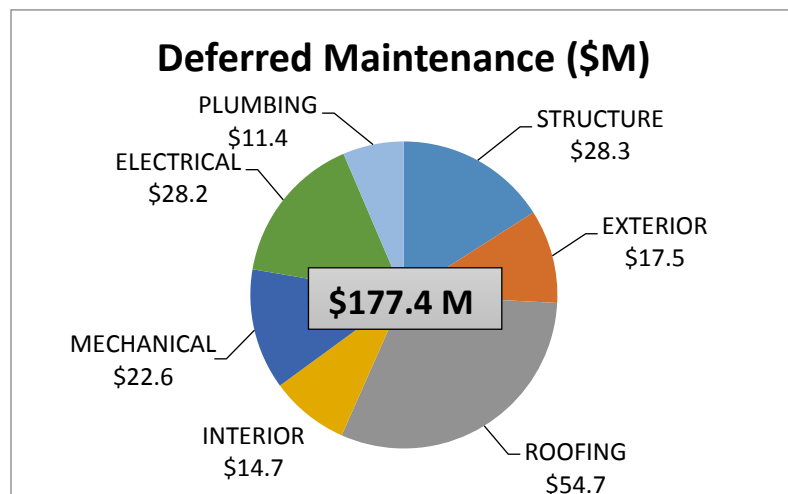


Figure 2-1 - Phase 2 estimated costs for Deferred Maintenance projects for all four territories

Source: Insular ABC's Inventory and Condition Assessment Phase II Report (in 2013 dollars)

2.3. Policy Basis

The facility management budget for the territorial school districts, as with many organizations throughout the world, is chronically underfunded and lacks dedicated funding streams. Schools depend on annual budget allotments that may vary based on other regional needs and public priorities. School facility management operation and maintenance (O&M)³ budgets must also compete with other major school related costs such as instruction and student support (e.g., staff salaries), student transportation, food services, and administration.

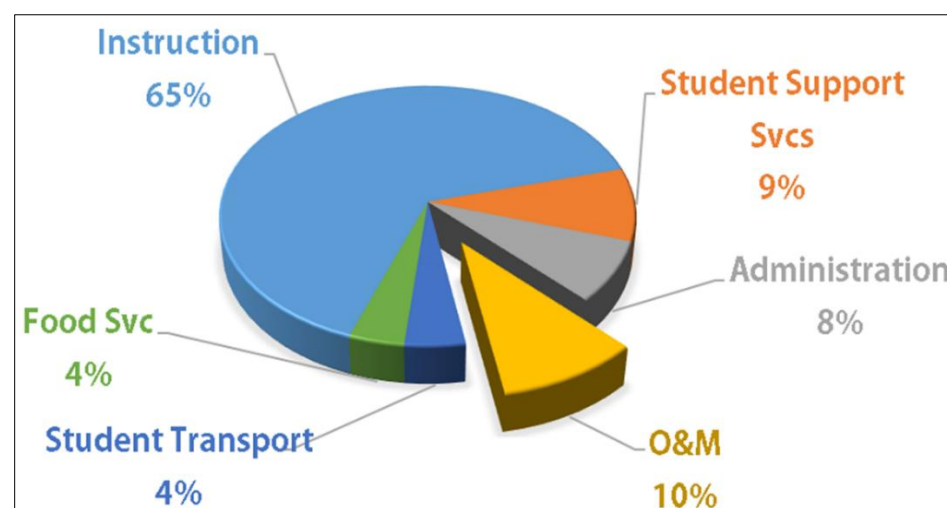


Figure 2-2 - U.S. Public Elementary & Secondary School Mean Expenditures (FY2005-2012)

- excludes capital outlay expenditures: building construction; roads and other improvements; equipment, land or existing structure purchases

³ Nationally, M&R budgets are reported as a subset of O&M budgets. Operations typically include utility costs which are three to four times the national average in the territories, making it difficult to compare with national averages. The M&R component is net of utility and other costs and provides a better basis for comparison (discussed in the following section).

O&M budgets account for several critical costs, in addition to maintenance, such as utilities, waste collection, custodial and grounds services, supplies and contract services.

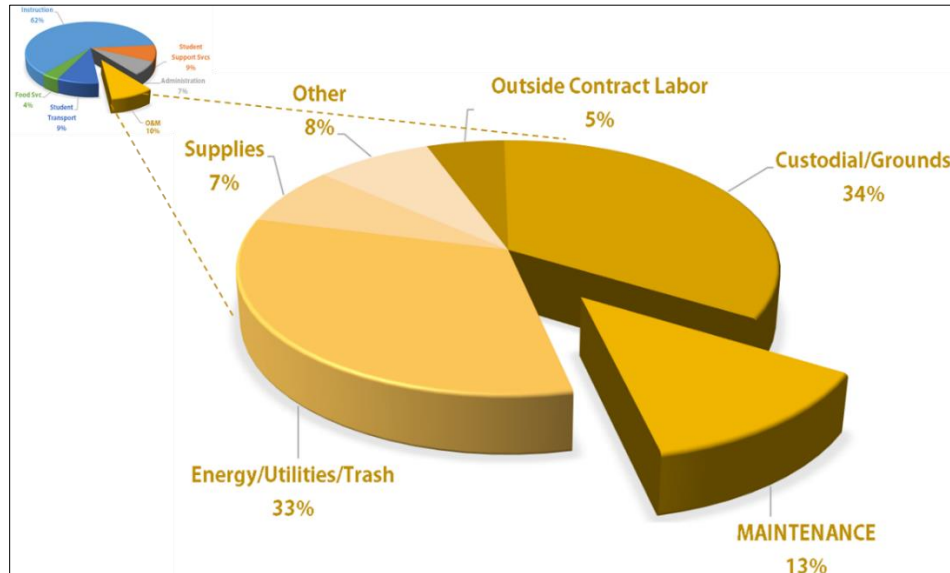


Figure 2-3 - Average Maintenance Percentage of a U.S. Public Elementary & Secondary School O&M Budget

Based on estimated U.S. Public Elementary & Secondary School Mean Expenditures, the average amount of the O&M budget spent on maintenance is 13 percent, or about one percent of the overall school spending. The territories invest far less than this in their M&R programs (most are subject to annual appropriations with no dedicated sources of funding), despite the harsh environmental conditions to which territorial schools are subjected. Adequate and dedicated funding streams are required to support functional and sustainable M&R programs.

An organizational analysis will be conducted to identify current staffing adequacy and make recommendations for program enhancements. This analysis will examine local practices and compare them to examples of national “best practices.” Research for national best practices of organizational sustainability will be conducted through examples from the National Council on School Facilities (NCSF), Association for Learning Environments (A4LE, formerly CEFPI), Center for Green Schools of the U.S. Green Building Council (CFGs/USGBC), National Clearinghouse for Educational Facilities (NCEF), the Hawaii Department of Education (HDOE), and the experiences from the four Insular areas.

The ABCs Team will conduct research and consult with host agencies on local policy possibilities that could be used to bolster and sustain facility management and maintenance budgets. At full buildout, the EAMS will help inform data-driven decision making by providing empirical data on regular maintenance staffing needs, and planned major repair and replacement costs. Local agency agreements may also be needed to establish plans and responsibilities for EAMS hosting and maintenance.

3. Objectives

The ABC's Initiative program provides technical assistance, tools, and coordination to help meet the needs of local facility managers and maintenance staff. Capacity building activities are essential to develop and implement facility management standards, design, construction, and maintenance techniques, to promote systemic change where best practices can be employed, and to fulfill OIA's second ABCs objective—to build local capacity to prevent the DM backlog from recurring.

The objective of the TSP is to develop and deliver a core syllabus of best practices and maintain contemporaneous records of attendees, hours of classes, and other metrics to objectively demonstrate OIA's commitment to building local capacity. The program will also address a schedule to transition responsibility of the DMRP to the local government through the course of the four-year program.

4. Strategy

Capacity building activities are essential to help insular facility managers operate as efficiently as possible to maximize use of limited funds, as well as to provide training on facility standards, maintenance, and construction techniques as needed. The TSP provides an important framework for achieving this objective and TSP-related activities may be refined annually as the work period proceeds. This Framework Plan establishes the path the ABCs Team, in collaboration with Territorial leadership, will take in encouraging sustainability initiatives in each facilities management department. The first step once the framework is endorsed will be to conduct a Needs Assessment to define the best ways to help build capacity. The ABCs Team will identify reciprocal duties and expectations between the ABCs Team and the Territories as a part of defining capacity-building efforts. Once the needs and duties are identified, the ABCs Team will ask each territory to endorse the actions defined to confirm commitments of all involved.

The TSP will consist of several sequential steps:

- The Framework Plan (this document)
- Initial Needs Assessment of national best practices and local practices (informed by a questionnaire to host agencies) – to develop benchmarks and ensure that all reasonable activities and programs are considered before the ideas are prioritized and programmed into discreet training “modules” to be created over the remaining years of the initiative.
- TSP Work Plan – to be developed after Framework Plan endorsement and Needs Assessment consultation. The Work Plan will define the modules and training exercises, development and delivery schedules, Year to Year goals for each territory, as well as the responsibilities of all parties involved.
- Organizational Analysis module (Module 1) – an assessment of each territory's current school facilities management and maintenance program, including a mapping of existing positions and duties, overview of local and national best practices based on secondary research, identification of needs relative to best practices and dedicated funding options.
- Maintenance Primers. Two modules have been identified so far – one focusing on grounds maintenance practices and procedures and the other focusing on HVAC maintenance practices and procedures (Modules 2 and 3).

- Other modules – as determined by the Needs Assessment (see potential options described below).
- Reciprocal Duties and Expectations – once the training modules are defined, the ABCs Team will work with the host agency and other local organizations, primarily through the embedded team Program Managers (PMs), to clarify support needs and roles for those participating in the various components.
- As a part of EAMS buildout, and separate but integral to the TSP, multi-year preventative maintenance budgets will be created to provide a basis for annual funding requirements that can be refined over time as additional information and current costs are collected. This component will require ongoing collaborative work with at least one host-agency partner to establish institutional knowledge and facilitate migration of duties to the host agency.

General TSP Process Diagram/Deliverables



The host agencies and Governors are the intended audience for the TSP findings and recommendations. Where applicable, measurable benchmarks will be incorporated into the TSP for periodic evaluation. The EAMS and local partnership roles are key components of the TSP, and are described below.

4.1. EAMS Deployment, Buildout, and Use

One of the highest EAMS-related training priorities in Year Two is for work order management, and facility and site asset data capture. These components lay the framework for EAMS functionality and its use in assisting facility management responsibilities. Associated training will help facility managers and related administrators maximize use of this valuable tool. EAMS buildout and training is being coordinated with the TSP and is integrally tied to facility management sustainability.

The ABCs Team will prepare training materials and ensure the embedded staff, and in particular the EAMS coordinator, is well trained and able to support local training requirements. The guidance will include basic system understanding, required procedures for work order management and documentation, steps for building out inventory assets for system updates, and data entry and analysis required for regular facility data reporting. The ABCs Team will also continue efforts to coordinate with territorial facility managers and other potential EAMS users to keep them informed of system functionality as modules are deployed and enhanced. Regular meetings will be held to build understanding of, and confidence in the system, as well as to encourage effective system use.

As a part of the EAMS build out, the ABCs Team will work with the host agency on maintenance, repair, replacement scheduling and budgeting. Life cycle cost analysis as well as maintenance and capital renewal budgeting techniques will be explored further (previously reviewed in the Year One school facility planning workshops) as a part of the TSP initiative. Related EAMS components will be operationalized for task alerts and medium to long term M&R budgeting. These components will effectively serve to inform daily activities and priorities, as well as provide facility managers with a forecast of future needs.

4.2. Partnerships

The TSP is focused on raising awareness of the value of an adequately funded M&R program (e.g., more cost effective to conduct routine maintenance than to deal with premature building system failure), the broader issues of school facility planning, programming and budgeting, and building local technical and vocational skills and safety awareness related to school facility construction. The long-term success of the plan is highly dependent on the level of local engagement; host and sister agencies, vocational/technical training agencies, and private sector engagement is going to be essential for success.

Organizational support and engagement from the Governor's Cabinet level and Board of Education will be required to support the adoption and ongoing use of the EAMS; the Governor's Office, IT, Public Works, Education and perhaps other insular area agencies will need to collaborate, share resources, and take ownership to effect systematic change. It is hoped that the insular areas will take advantage of OIA's grant programs to support this organizational change ranging from providing consulting services, equipment purchases, and funding temporary staff positions to help implement program enhancements.

4.3. Identification of Modules

The TSP will ultimately be comprised of 8-10 training modules developed and delivered (perhaps multiple times) over the course of the remaining four years of the initiative. A module is a learning tool that addresses a specific topic and may be in the form of a report, workbook, briefing, workshop, or primer. Modules are to be determined through research of industry best practices and in collaboration with local stakeholders in each territory. The audience for the modules is intended to include both management and staff.

4.3.1. Needs Assessment

A Needs Assessment will be used to identify the most urgent and impactful training and management topics pertaining to all territories. The Needs Assessment will include a questionnaire distributed to host-agency personnel with a brief explanation of potential modules, and will accommodate open-ended responses by contributors. Participants will help prioritize the various modules according to what is most useful to their area of expertise. The survey responses will identify which priorities are aligned across the territories. The survey will be used to inform the Needs Assessment to help determine which priorities fit within the TSP resource constraints such as time and funding. The Needs Assessment will also include more in-depth interviews with facility managers, and other stakeholders as appropriate, to help identify challenges and define facility management needs, particularly for the Organizational Sustainability module.

The ABCs Team will work with host agency and Governors in determining the appropriate personnel to involve in the survey, including any needed management approvals, and establish commitments for engagement and timeframes. It is preferred that the survey be limited to the staff of the central facility management office, but could be extended to a broader group of stakeholders if deemed appropriate. Agreements will also be made with the host agencies on the use and distribution of the survey results. Feedback will likely align with concerns common to facility managers around the country. Information gathered will be carefully analyzed and organized to respect the confidentiality of individual respondents and prioritize issues based on local and national fact finding. Phone conferences and/or

email correspondence will precede the distribution of the survey and other interview-related engagement to ensure concurrence between ABCs Team objectives and host agency protocols.

4.3.2. Selected Modules

Several of the 8-10 modules have been identified, based on needs identified in previous condition assessments, for year two of the four-year TSP. These are summarized below.

1. **Organizational Sustainability Plan:** This is the highest priority module that will serve as a roadmap to transition ABCs program responsibility from the ABCs Team to the territories. It will document existing organizational structures, job descriptions, sources of funding and annual budgets, and then benchmark local school facilities management departments with national standards (e.g., per capita and per square foot budgets, minimum staff qualification requirements, organizational structure, roles and responsibilities, management and workforce training, relationships with sister agencies, etc.). It will include the formulation of an organizational “transition plan” (covering personnel and budgets) to make the local organizations more sustainable and productive. Recommendations will include a multi-year preventative maintenance budget for each territory to determine annual funding requirements and a summary of funding options including among others: from real property tax levies (Guam), gas tax levies (American Samoa) and lump sum General Fund allocations (Hawai‘i).

Findings and recommendations will be endorsed by senior territorial leadership and will identify the preferred end state for each agency and establish a transition path to sustainability for each territory over the remaining years of the ABCs initiative. This transition will align with an increase in local responsibility and a decrease in support needed from outside the territory. The ABCs Team will prepare an annual evaluation on progress towards meeting the transition milestones, including recommendations on how to accelerate or adjust the course to more efficiently achieve the stated goal of organizational sustainability.

2. **Maintenance Primers:** #1: Grounds Maintenance Primer and #2: HVAC Maintenance Primer. The civil and mechanical engineer Subject Matter Experts (SMEs) will develop training modules on grounds maintenance and HVAC maintenance practices, respectively. The two primers will incorporate information to support the training of local maintenance staff. These topics have repeatedly been raised by host agencies and SME team members as critical areas where increased competency can significantly improve local conditions and reduce operations and maintenance costs. The SMEs will prepare the respective modules and they will be delivered by the embedded teams. The civil engineer will conduct a site inspection as part of preparing the grounds maintenance primer (not needed for the mechanical engineer).

4.3.3. Potential Modules

Potential topics for the remaining 5-7 modules were also identified based on needs identified during Phase 2 and Phase 3 of Year 1 work and may not encompass all existing priorities. These will be revised based on the results of the Needs Assessment.

These modules fall into three basic categories: 1. Organizational Sustainability, 2. Technical Skills, and 3. Facility Planning and Design. As previously stated, EAMS training and sustainability efforts will be

conducted through a separate concurrent effort. These module categories are further described in the Needs Assessment Survey.

Table 2 - Potential Modules (subject to change)

MODULE
1. Organizational Sustainability
A. Staffing/Administration
B. Asset Management Principles
1. Lifecycle cost analysis techniques
2. Maintenance and capital renewal budgets
3. Facility maintenance benchmarks/reporting metrics
2. Technical Skills
A. Job Site
1. Job site safety
2. Construction best practices
3. Structural repair systems
4. Concrete forming
5. Grounds maintenance
6. HVAC maintenance
7. Apprenticeship programs
B. Management
1. Cost estimating / Budgeting
2. Building code primer
3. Scope/RFP writing and processes
4. Regulatory compliance / Permitting
3. Facility Planning and Design
A. Campus planning principles
B. Sustainable design
C. Stormwater management

Both technical skills and management topics will include practical implementation guidance on topics such as permitting and regulatory compliance for the module subject matter. While some modules address future facilities, modules will also focus on the ongoing day-to-day facility maintenance and operations needs that will be necessary once the DM backlog is cleared.

4.4. Module Development Process

Once the module topics have been identified, the development will be led by the ABCs Team with participation territory stakeholders. Some development resources include:

- Initial data derived from EAMS
- Interviews (Program Managers, as well as host-agency facility managers)
- Industry best practices research
- ABCs Team subject matter experts
- Existing local organizations

The TSP rollout is to be executed over a four year time period with approximately three modules per year. Year one (2015) is complete. This Framework Plan addresses years 2-4.

YEAR	Status	MODULE
1	Complete for American Samoa and CNMI (2015)	<ul style="list-style-type: none"> School Facility Planning Workshops IEQ Handbook
2	In development	<ul style="list-style-type: none"> Organizational Sustainability Plan Maintenance Primer #1: Grounds Maintenance Maintenance Primer #2: HVAC Maintenance
3	Needs assessment underway	TBD Based on Needs Assessment
4	Needs assessment underway	TBD Based on Needs Assessment

Results of the Needs Assessment will aid in further development of timeline and module phasing according to territory needs.

Helpful Resources – to be used in developing recommendations:

National Council on School Facilities: <http://www.facilitiescouncil.org/ncsf%2Dhome/>

National Clearinghouse for Educational Facilities: <http://www.ncef.org/>

The Center for Green Schools at the U.S. Green Building Council: <http://www.centerforgreenschools.org/>

Association for Learning Environments: <http://www.a4le.org/websites/main/index.php?p=139>

ABCs Program Reports:

- Phase 1 - U.S. Insular Areas Education Facility Inventory and Condition Assessment Study
- Phase 2 - Inventory and Condition Assessment Phase II Report: Insular ABCs Insular Schools: Assessment of Buildings and Classrooms.
- Phase 3.1 - Indoor Environmental Quality (IEQ) Handbook.

4.5. Completed TSP Modules

4.5.1. School Facility Master Planning

The ABCs Team was invited to conduct workshops in two of the four territories focused on the school facility planning process (e.g., establishing a local policy framework, long range plan, short range implementation strategy, CIP plans, and facility standards); the workshops took place over a two-day period, with a full day of presentations and work sessions on Day one and a half day on Day two. Topics on the first day focused on defining adequate space and site design. Presentations and activities on the second day focused on planning and administration metrics, including budgeting. The results of the facility planning sessions are available here: <http://hhfplaners.com>; see tabs for American Samoa and CNMI. The School Facility Planning Workshop in Guam and USVI could not be scheduled in 2015, and opportunities to hold workshops for these territories will be pursued in the TSP.

4.5.2. Indoor Environmental Quality (IEQ) Guidebook

IEQ (thermal comfort, indoor air quality, visual comfort/lighting, and acoustical performance) affects student behavior, test scores, and dropout rates, as well as teacher retention. The Phase 3.1 objective of the IEQ effort was to take the Phase II school-by-school IEQ recommendations and develop a primer and checklist to be used by school staff and administrators, as well as district facility managers, to monitor progress towards improving classroom IEQ. Recommendations range from readily achievable improvements such as screens or fans, larger site specific possibilities such as landscaping or other exterior improvements, or inventory-wide capital improvements such as building insulation and window upgrades. Appendix B includes checklists for visual inspection of buildings and classrooms. These are broken into the four main categories. Each line item explains what the surveyor should look for, and provides spaces to indicate whether or not the issue is present.

In some cases the concerns align with DM programmed for repair work, but in many cases the IEQ concerns are linked to interconnected issues that would have to be addressed through larger scale capital improvement initiatives or more passive solutions that could be implemented by school principals with some assistance from the central office. Indications of those items that could be addressed in the DMRP and those that would not, are itemized in IEQ Handbook Appendix C. The IEQ Handbook is available here: <http://hhfplanners.com>; see tabs under any location.

5. Next Steps

Further actions to implement the TSP Framework Plan are to gain approval and concurrence with the TSP development strategy, timeline, and module topics. The ABCs Team and host-agencies should agree on the scope of the modules to ensure that territory needs are met, and that proposed actions are feasible. The team will then begin work on module development for the first three identified modules. Ongoing engagement will be critical for development of the modules in order to produce the most effective tools for host-agency facility managers and staff.

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