



Green Physical Needs Assessment Tool (GPNA)

FINAL DRAFT User Guide

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Purpose

Applicability

This U.S Department of Housing and Urban Development (HUD) PIH Green Physical Needs Assessment (GPNA) Tool Guide assists you in preparing your GPNA by guiding you through the GPNA process using HUD's GPNA tool.

The results of your GPNA:

- Help to identify and prioritize work to be performed at each Development/AMP with Capital Funds and other funding sources,
- Help to make long-term strategic decisions regarding housing portfolios,
- Help to evaluate modernization, repositioning, redevelopment, and inventory removal decisions on the Development/AMP level.

The GPNA tool allows both small and large Public Housing Authorities (PHAs) to assess the needs of their public housing portfolio for a term of up to 20 years.

The primary goals of the GPNA are to:

- Enable HUD to measure the impact of annual Capital Fund appropriations for the physical needs of the public housing inventory.
- Evolve PHA management practices toward a Development/AMP-based capital planning strategy.
- Achieve energy integration goals outlined within the 2005 Energy Policy Act.
- Produce data on sustainable activities for the Capital Fund and support HUD's high-priority performance goal to create energy-efficient housing.
- Enable PHAs to better assess the position of their portfolios and take advantage of potential opportunities.

Each year, Capital Funds are provided to PHAs to modernize or otherwise develop public housing. The GPNA tool enables HUD to measure the impact of these funds on the public housing portfolio by aggregating the needs data generated by PHAs. The GPNA is expected to be updated annually to ensure any changes in specific needs addressed are reflected. The GPNA is intended to be repeated every 5 years to update cost information, to reflect new needs, and to establish an ongoing basis for strategic planning.

The 20 year assessment term provides greater planning visibility, particularly for major projects which tend to occur less frequently. Development/AMP-based GPNAs combined with HUD's focus on the Development/AMP-based Asset Management Program ensure PHAs rely on standard industry practices for effective capital planning.

The 2005 Energy Policy Act amended the Capital Fund section of the U.S. Housing Act of 1937 to encourage the integration of “utility management and capital planning to maximize energy conservation and efficiency measures.” HUD’s Agency Performance Goals include a commitment to creating energy efficient housing through energy conservation and green retrofits. The GPNA tool integrates potential energy conservation measures identified by Energy Audit and assists PHA’s in evaluating the cost effectiveness of replacing building systems and other components at the end of their useful life, as well as the cost effectiveness of early replacement of building components. The GPNA will integrate energy efficient and green improvements into future PHA capital planning, and enable HUD to measure progress toward achieving energy-efficient, green public housing.

An important objective of the GPNA tool is for PHAs to engage in an effective Development/AMP-based strategic planning process. The GPNA will enable PHAs to take advantage of new funding opportunities as capital markets change and new programs or incentives are offered.

The GPNA tool is a standalone Windows-based Microsoft Access® application that can be installed on any PC or handheld device. This tool is compatible with desktop PCs, notebook PCs, and/or network computers. The GPNA tool is available for download on HUD’s website. The GPNA tool can be pre-populated with specific PHA’s agency information, along with Development/AMP, building, and unit data from current Inventory Management System/PIH Information Center IMS-PIC records in order to help you start the GPNA process faster. You can also customize the GPNA to meet your more specific local area needs.

As a strategic planning tool for PHAs, the GPNA is less focused on reporting to HUD and more focused on recording real information that is useful to the PHA for its planning purposes. The tool allows for considerable customization and judgment by the PHA and only a subset of the higher level data is actually collected by HUD. For example, HUD collects only the gross component category totals (i.e. site, building exterior, building systems, common areas, and units) and selected major components for each development.

The purpose of this GPNA Tool User Guide is to provide the user with practical step-by-step instructions on how to use the tool, as well as other guidance on protocols for performing the GPNA.

GPNA Components

The GPNA assesses four main Needs Components, which together provide an aggregate Capital Needs number.

These four Needs Components include:

- **Replacement needs**— Replacement needs refer to basic or standard Building and Site building-systems and components.
- **Sustainability needs**—Sustainability needs refer to only those improvements or alternative replacement components, which replace non-green components with green/energy efficient components.
- **Marketability/livability needs**— Marketability/livability needs are those capital improvements, which add new functionality, or which otherwise promote occupancy through current tenant retention or new tenant procurement.
- **Accessibility needs**—Accessibility needs are those improvements necessary for adding accessibility functionality or maintaining current accessibility functionality.

The GPNA tool includes a comprehensive list of measurable building/site building systems and component items based on component lists used by HUD, green physical condition assessments, Uniform Physical Condition Standards UPCS, and other building industry standards. The GPNA also permits the user to add components which may not have been included on the pre-loaded list.

Component Unit Cost and Effective Useful Life (EUL) are applied to all building/Site components as part the GPNA. Component unit costs are based on industry cost indices of to be chosen by the PHA, such as R.S. Means or Marshall & Swift.

The EUL is used as the basis for the replacement of components as they meet the end of their life cycles. The EUL is applicable to most components and is based on industry standards. Other outside sources, manufacturing specifications, and building standard specifications may be used as a basis for EUL, as well as EUL figures from national cost indices.

The GPNA tool includes variance reports that assist the PHA in identifying component costs and EUL values determined by the PHA (not based off an approved national building cost index service). These variance reports are intended for management verification purposes at the local level. These reports also provide a more detailed analysis of anomalous GPNA results for the purpose of HUD quality control.

Standards

Standards refer to established descriptions of assessment components, and facilitate the consistent review of GPNA findings. Assessment components are divided into five categories:

- Site
- Building exterior
- Building systems
- Common areas
- Units

These Standards help to define structure types, based on the defined types within the IMS-PIC building and unit module.

Protocols

Protocols demonstrate the required or recommended procedural methods, or “how to” conduct the GPNA. These include protocols for determining sampling size, utilizing qualified personnel, performing the GPNA, and other protocols to help get the most information from collected data, as well as promote consistency across all PHAs to ensure HUD aggregation provides for an accurate reflection of actual needs across all PHAs.

The performance of the GPNA proceeds in three phases:

- **Pre-Assessment** —focuses primarily on preparing you for the assessment, as well as collecting and recording development data, and utilizing architectural plan measurements and count data.
- **Assessment** —focuses on helping you to identify all building components, including quantities of each present component, establish remaining useful life (RUL), as well as determine eligibility and cost of component refurbishment or replacement.
- **Post-Assessment**—focuses on establishing industry standard parallels through collection, review, data input, and report production.

“The Nuts and Bolts of the GPNA Tool”

The HUD GPNA tool performs two primary functions to effectively guide you through the GPNA process. These functions can be accessed through the two main components of the GPNA tool; The Dashboard, and the Control Panel.

The Dashboard displays a summary-overview of entered assessment data.

The screenshot shows the 'Dashboard' interface for the 'GREEN PHYSICAL NEEDS ASSESSMENT' (GPNA). The header includes the HUD logo and the text 'GREEN PHYSICAL NEEDS ASSESSMENT Dashboard'. The main content area is titled 'PHA Information' and contains several sections:

- PHA Data:** A list of metrics including Number of Development/AMPs (3), Number of Sites (5), Number of Buildings (8), Number of Units (17), Total PNA (\$7,809,306.00), and various need categories like Immediate Needs, Replacement Needs, Refurbishment Needs, Sustainability Needs, Marketability Needs, Accessibility Needs, Critical Needs, Site Needs, Building Exterior Needs, Building System Needs, Common Area Needs, Unit Needs, Window Needs, Roof Needs, Kitchen Needs, Bath Needs, and Exterior Wall Needs.
- Needs By Type:** A grid of summary tables for different need categories:
 - Total Needs:** Average Need per Year: \$390,465.00; Average Need Per Dev/AMP: \$2,603,102.00; Average Need Per Building: \$976,163.00; Average Need Per Unit: \$459,371.00.
 - Sustainability Needs:** Average Need per Year: \$331.00 (0.08%); Average Need Per Dev/AMP: \$2,205.00; Average Need Per Building: \$827.00; Average Need Per Unit: \$389.00.
 - Replacement Needs:** Average Need per Year: \$390,028.00 (99.89%); Average Need Per Dev/AMP: \$2,600,187.00; Average Need Per Building: \$975,070.00; Average Need Per Unit: \$458,857.00.
 - Refurbishment Needs:** Average Need per Year: \$92.00 (0.02%); Average Need Per Dev/AMP: \$616.00; Average Need Per Building: \$231.00; Average Need Per Unit: \$109.00.
 - Accessibility Needs:** Average Need per Year: \$9.00 (0.00%); Average Need Per Dev/AMP: \$60.00; Average Need Per Building: \$22.00; Average Need Per Unit: \$11.00.
 - Marketability Needs:** Average Need per Year: \$5.00 (0.00%); Average Need Per Dev/AMP: \$33.00; Average Need Per Building: \$12.00; Average Need Per Unit: \$6.00.
- PNA Projection:** A line graph showing the projected amount over 20 years. The y-axis ranges from \$0 to \$800,000. The x-axis is labeled 'Year' from 0 to 20. The graph shows a fluctuating trend with a peak around year 9.

At the bottom of the dashboard, there are buttons for 'Go to Control Panel' and 'Go to Reports'.

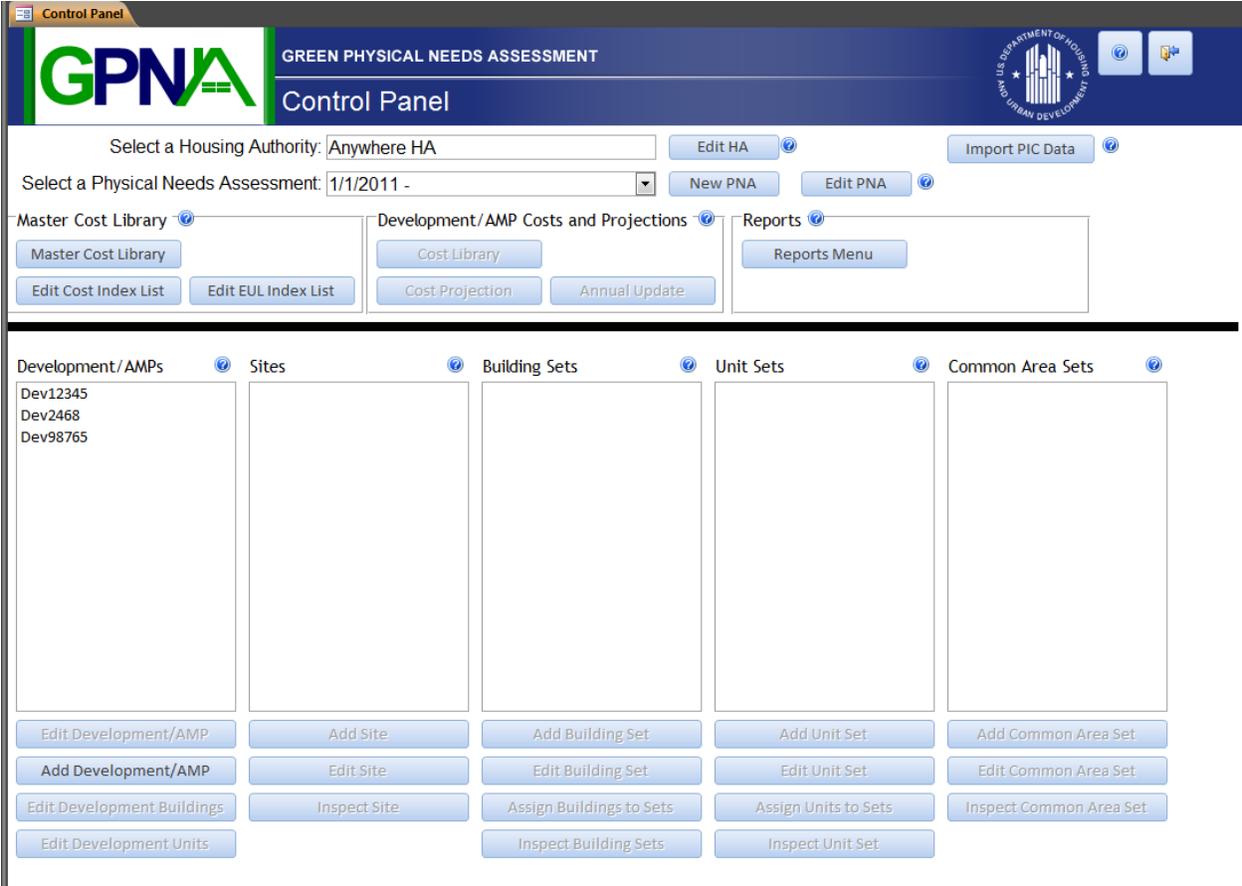
The dashboard will allow you to view aggregated data as you input PHA information into the GPNA tool. Available functions allow you to view aggregated data on a PHA-wide level, as well as on development-wide level. The dashboard also allows you to track assessments – the number of completed and remaining assessments.

Additionally, all PNA and Development/AMP Reports may be accessed and/or generated from the Dashboard.

The second main component of the GPNA tool is the Control Panel.

The Control Panel provides a central location for assessment data entry, and allows the user to select and manage PHA and GPNA information from a central location within the tool.

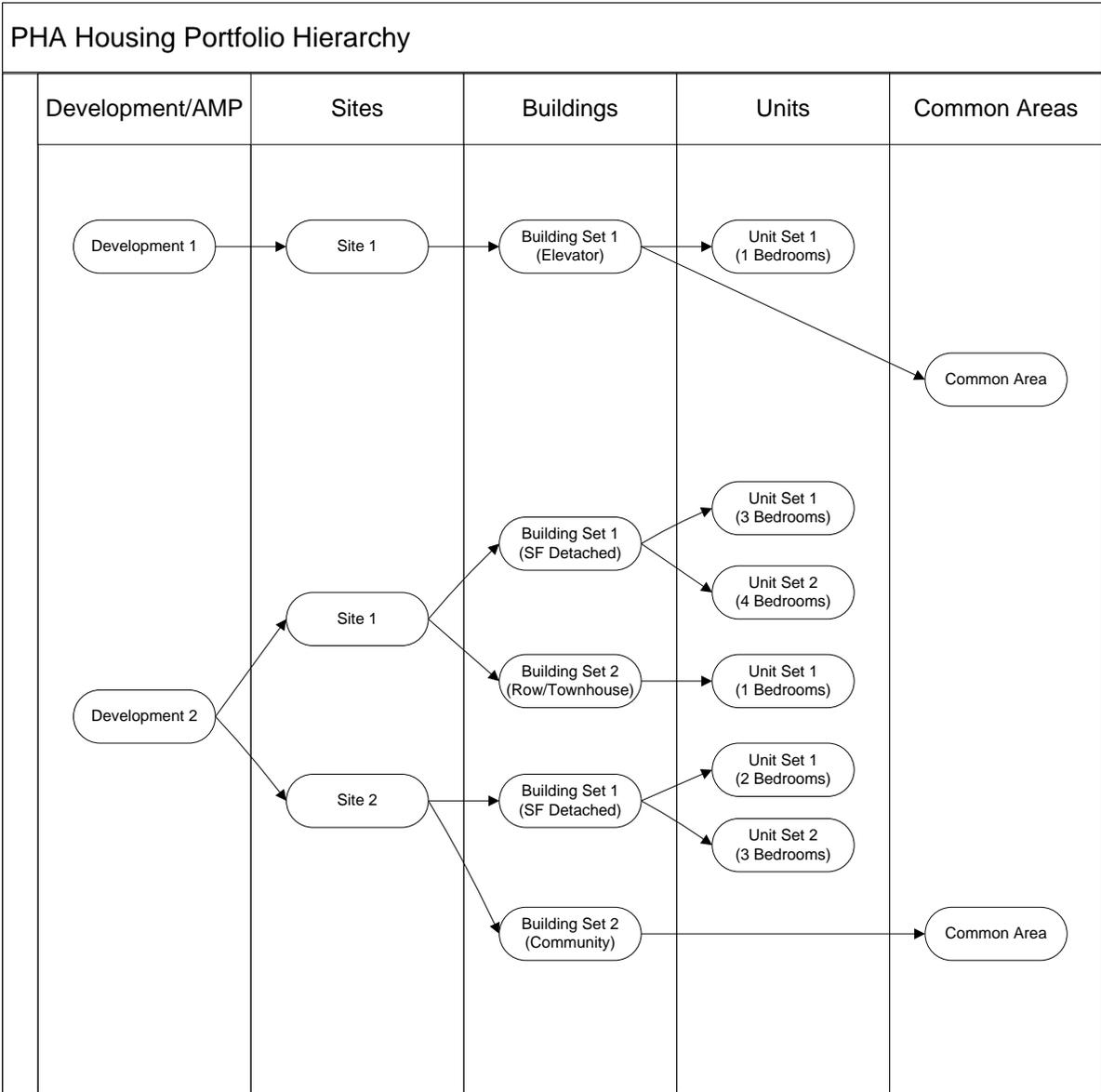
The Control Panel is divided into three sections. The first section can be found at the top of the Control Panel screen and contains controls to initiate a GPNA, including controls to select and manage PHA and GPNA information. PHA-specific information and GPNA data is set and stored within this section of the Control Panel.



The second section of the Control Panel provides controls to enter, select, and manage PHA housing portfolio information. This area is designed to reflect the hierarchy of a PHA’s housing portfolio – portfolio organization is vital to the overall success of the GPNA process. This second section serves as the principle mechanism, whereby all inspection data is organized according to a housing portfolio hierarchy. Inspection Data types include: Development/AMPs, Sites, Building Sets, Unit Sets, and Common Area Sets.

The GPNA tool has been designed to take into account PHA housing portfolio variability and to organize PHA housing stock in a way which visually represents an established hierarchy.

The hierarchy is as follows:



The sampling size protocol calls for 100% of Sites to be inspected, 20% of buildings within a building set, 10% of units within a unit set, and 100% of common areas. This hierarchy structure is helpful in creating an inspection design and effective sampling size plan.

As illustrated above, the hierarchy flow may be simple or more complex. For instance, in Development 1 in the Figure above, the hierarchy is simple. Development 1 is comprised of one Site, one Building Set, one Unit Set, and one Common Area Set.

Conversely, Development 2 illustrates a more complex development hierarchy. Development 2 is depicted as consisting of two (2) Sites with two (2) building sets each. Building Set 1 for Site 1 consists of two (2) Unit Sets, whereas Building Set 2 for Site 1

has only one (1) Unit Set. Similarly, Building Set 1 for Site 2 consists of two (2) unit sets, whereas Building Set 2 for Site 2 has no Unit Sets, but rather a Common Area set.

The third section contains Costing and Report controls, such as the Master Cost Library, Development/AMP Costs and Projections, and other Reports.

The Master Cost Library serves as the main repository of cost data. Development/AMP Costs and Projections are based on data propagated from the Master Cost Library, as well as Site, Building, Unit, and Common Area inspection data. Cost line-items and projections can be customized to meet Development/AMP needs from within this section.

Report controls within the Control Panel provide you with the ability to present cost projections data in various report formats.

Other key features include:

- An Import/Export function is included to help facilitate the data collection and data entry portion of the GPNA process. This feature allows for multiple users to simultaneously work on the GPNA, as well as facilitates an easier transfer of data in a set format. Data sets eligible for export, include: Master Cost Library (Excel export), Site, Building, Unit, and Common Area inspection forms.
- A Master Cost Library allows the user to view and edit the Replacement Cost, Refurbishment Cost, Local Multiplier, Replacement EUL and the Refurbish EUL. Also, this feature allows the user to enter cost data for a master set of line items that are then copied to all Developments/AMPs within the current GPNA and saves the user from having to set up each project's cost library individually. Furthermore, it is possible to customize the master cost library for each development without affecting the other developments.
- A Cost Projection feature produces projections automatically as the data is entered into the tool. Cost projections reflect anticipated replacement and refurbishment component costs over a set term - up to 20 years. Cost projections can be queried for either the entire PHA's portfolio or for individual Developments/AMPs. Cost Projections represent estimates of anticipated capital improvements, and not actual cost figures.
- A Unit Conversion Calculator is included and intended for use when converting GPNA measurements and take-off data, including linear distance, area, energy, and/or liquid volume.
- Help features are a part of the tool to assist you in navigating your way throughout the assessment. Look for this icon  to access brief explanations and instructions about various GPNA tool functions.

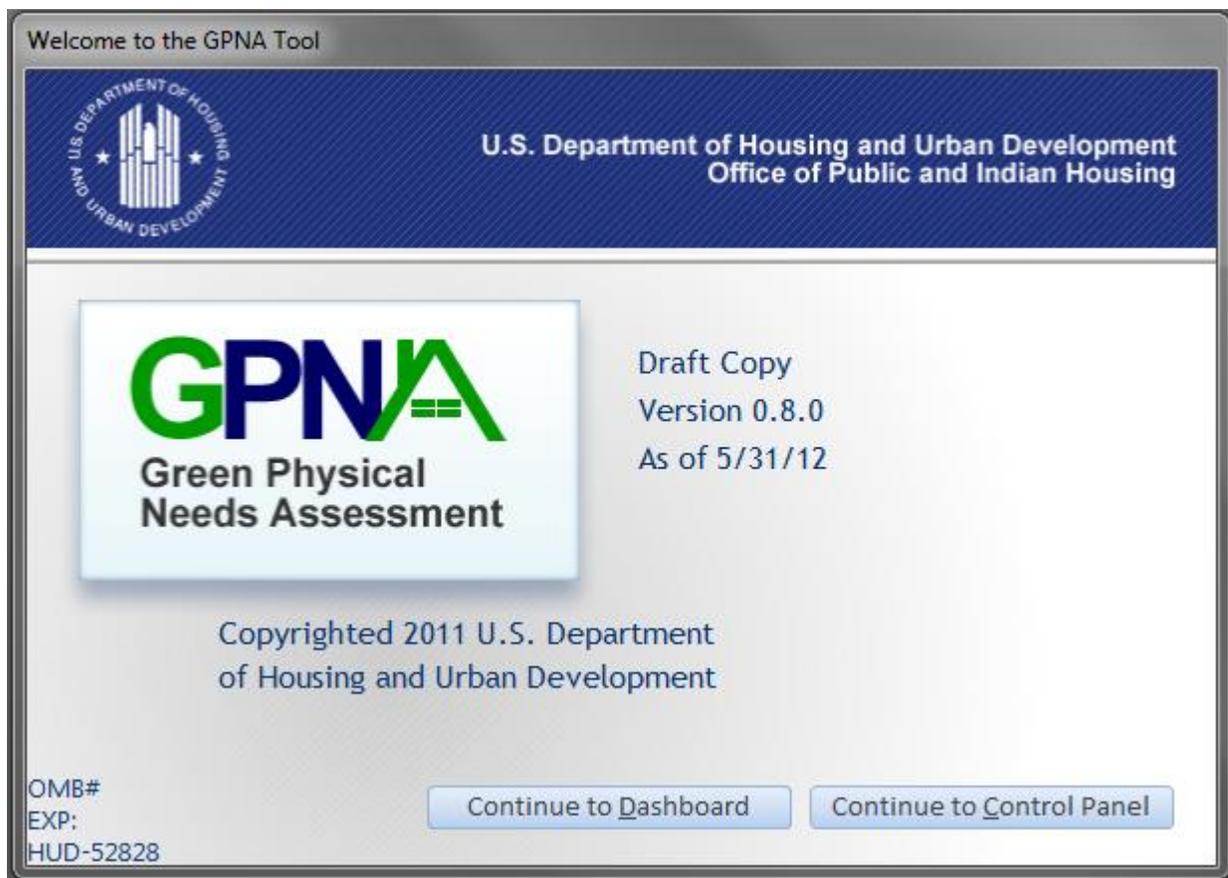
Getting Started with the GPNA Tool

Download the GPNA Tool from the HUD Website

http://portal.hud.gov/hudportal/HUD?src=/program_offices/public_indian_housing/programs/ph/capfund/gpnatool

Launching and Navigating the GPNA Tool

Each time you launch the GPNA tool, you are given the option to navigate to either the Dashboard or the Control Panel by clicking the coordinating button.



The following sections provide instructions on how to navigate the Dashboard and Control Panel.

Using the Dashboard

The Dashboard serves as the home page for the GPNA tool.

From the Dashboard, you can:

- Review PHA and Development/AMP information
- Review projected PHA and Development/AMP needs data by Type, Category, Component, and Year
- Access the Control Panel to enter or edit GPNA data.

PHA Information



PHA needs data for a specific GPNA can be reviewed by type, component, category, and year from within this section of the Dashboard

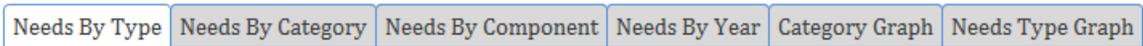
To review PHA needs data, select a GPNA from the PNA drop-down.

HA Code:

HA Name:

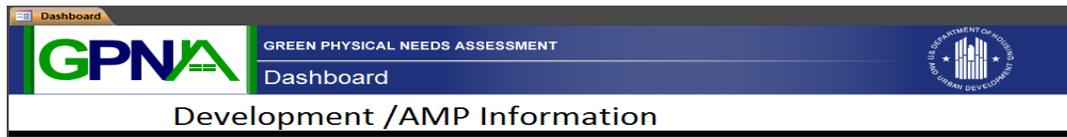
PNA:

Then click on any of the following six available tabs to review data:



- **Needs by Type** - Provides a cost breakdown of needs requirements by type, including Replacement, Accessibility, Sustainability, Refurbishment, and Marketability needs.
- **Needs by Category** - Provides a cost breakdown of needs requirements by category, including Site, Common Area, Unit, Building Exterior, and Building System needs.
- **Needs by Component** - Provides a cost breakdown of needs requirements by component, including Window, Roof, Exterior Wall, Kitchen, and Bath needs.
- **Needs by Year** - Provides a cost breakdown of all needs requirements by year for the first five years, and then in 5-year terms through year 20.
- **Category Graph** – Provides a visual breakdown of needs costs by category, including Site, Building Exterior, Building System, Common Area, and Unit
- **Needs Type Graph** – Provides a visual breakdown of needs costs by type, including Replacement, Refurbishment, Sustainability, Marketability, and Accessibility

Development/AMP Needs Information



You can also review a Development/AMP's needs from the Development/AMP Information section of the lower Dashboard. As you update Development/AMP data in the Control Panel for a specific Development/AMP, the Development/AMP needs data on the Dashboard will automatically be updated.

To review Development/AMP needs data for a specific Development/AMP select the Development/AMP from the Development/AMP drop-down:

PNA:

Dev/AMP:

Then click on any of the following six tabs to review Development/AMP data:



- **Dev Needs by Type** – Provides a cost breakdown of Development/AMP needs requirements by Type, including Replacement, Accessibility, Sustainability, Refurbishment, and Marketability needs.
- **Dev Needs by Category** – Provides a cost breakdown of Development/AMP needs requirements by Category, including Site, Common Area, Unit, Building Exterior, and Building System needs.
- **Dev Needs by Component** – Provides a cost breakdown of Development/AMP needs requirements by Components, including Window, Rood, Exterior Wall, Kitchen, and Bath needs.
- **Dev Needs by Year** – Provides a cost breakdown of Development/AMP needs requirements by Year for the immediate and first five years, and then in 5-year terms through year 20.
- **Dev Category Graph** – Provides a visual breakdown of Development/AMP needs costs by Category, including Site, Building Exterior, Building System, Common Area, and Unit.
- **Dev Needs Type Graph** – Provides a visual breakdown of Development/AMP needs costs by Type, including: Replacement, Refurbishment, Sustainability, Marketability, and Accessibility needs.

Using the Control Panel

The Control Panel allows you to create, review and edit Housing Authority (HA) and Green Physical Needs Assessment (GPNA) data in order to:

- Add, assign, edit, and inspect Sites, Building Sets, Unit Sets, and Common Area Sets
- Add and edit data related to the inspection of Development/AMPs, Buildings, Units, and Common Areas
- Access the Cost Library
- Produce cost projections
- Perform annual updates
- Access reports that provide detailed information on both the Development/AMP and GPNA

The screenshot shows the GPNA Control Panel interface. The top navigation bar includes the GPNA logo and the US Department of Housing and Urban Development logo. Below the navigation bar, there are several sections: 'Select a Housing Authority' (set to 'Anywhere HA'), 'Select a Physical Needs Assessment' (set to '4/24/2013 -'), 'Master Cost Library', 'Development/AMP Costs and Projections', and 'Reports'. The main content area is divided into five columns: 'Development / AMPs', 'Sites', 'Building Sets', 'Unit Sets', and 'Common Area Sets'. Each column contains a list of items and a set of action buttons. The 'Development / AMPs' column lists 'Dev12345', 'Dev2468', and 'Dev98765'. The 'Sites' column lists 'Site 1' and 'site 2'. The 'Building Sets', 'Unit Sets', and 'Common Area Sets' columns are currently empty. At the bottom of the interface, there is a 'Go to Dashboard' button.

Note: Exercise caution when making changes to selected Development/AMPs, Sites, Building Sets, Units, and or Common Area sets. Verify all previous selections to avoid confusing edits and updates between Category Needs inspections.

Setting-up Multiple Users

There are two versions of the HUD GPNA Tool available; the Full version and the Client-Database version.

The Full version is available as an Install Pack containing everything needed to setup the HUD GPNA Tool and being conducting the GPNA. The Full version Install Pack must be saved locally and PNA data can only be accessed by a single user.

However, a PHA may choose to simplify the GPNA process by delegating various tasks to multiple users. Accordingly, the HUD GPNA Tool has been designed to allow for a Multiple User configuration using the Client-Database version. The Client-Database version consists of two parts – a Client Install Pack and a Database.

The Client Install Pack is similar to the Full version and should also be installed locally on a computer. However, the Client Install Pack may be installed on several computers to allow multiple, networked, single-users to simultaneously access the PNA. The Client Install Pack was designed to work with the Database.

The Database is the second part of the Client-Database version and functions as a repository for PNA data. However unlike the Client Install Pack, The Database must be saved to a networked or other shared drive to allow multiple users to work on the same PNA.

The HUD GPNA Tool must be installed on a networked or other shared drive to be compatible with multiple users. The following provides instruction on configuring the GPNA Tool for multiple user compatibility.

First, install the HUD GPNA Tool Client-Database version on your computer*

*Help locating the HUD GPNA Tool Client-Database version download can be found on the HUD.gov website.

Once you have successfully installed the HUD GPNA Tool Client-Database version to your computer,

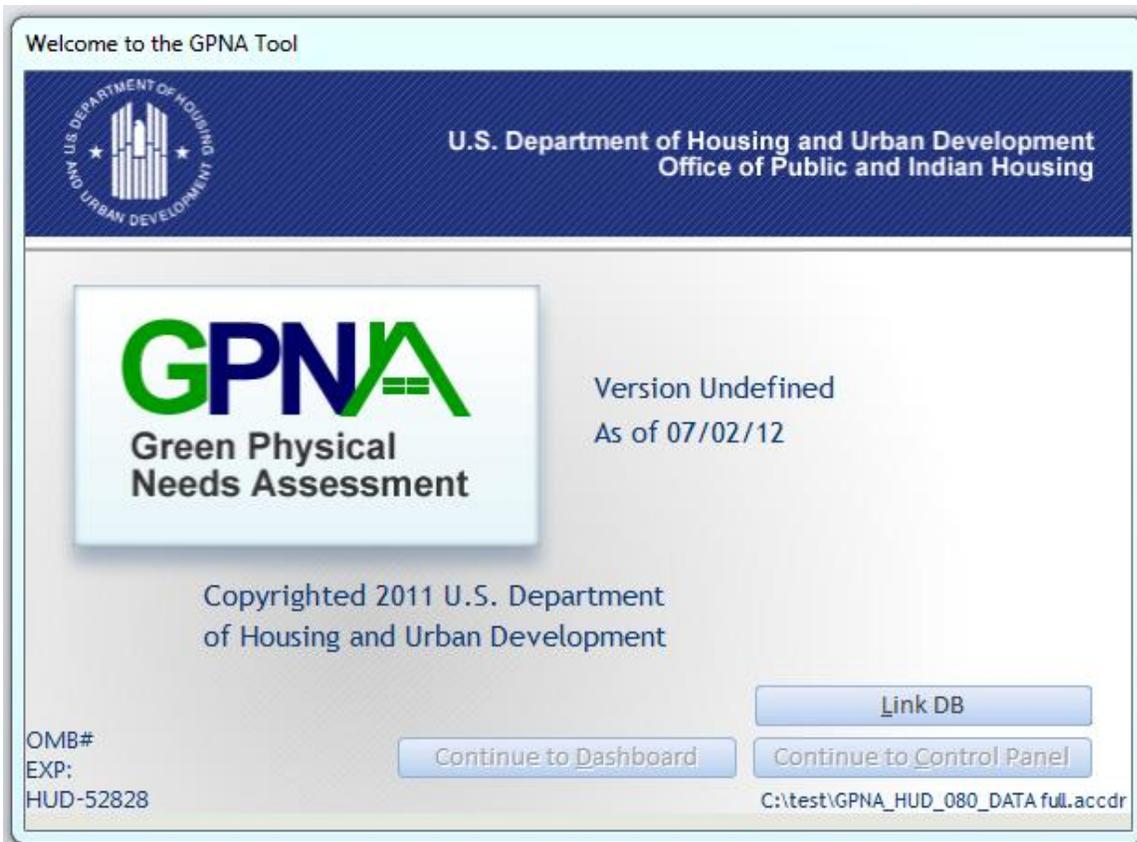
Navigate to the GPNA Tool Client-Database version's designated local save location from your computer's desktop.

You will need to make a copy of the Database file to place on your network or other shared drive.

To copy the HUD GPNA Tool Database file to a networked or other shared drive,

- 1) Select on the file location and right click to access an additional options menu.
- 2) Select Copy from the options menu –
- 3) Navigate to the desired networked or other shared drive and create a New Folder*.
- 4) Open the New Folder* and right click inside the folder window to again access the additional options menu.
- 5) Select paste from the options menu

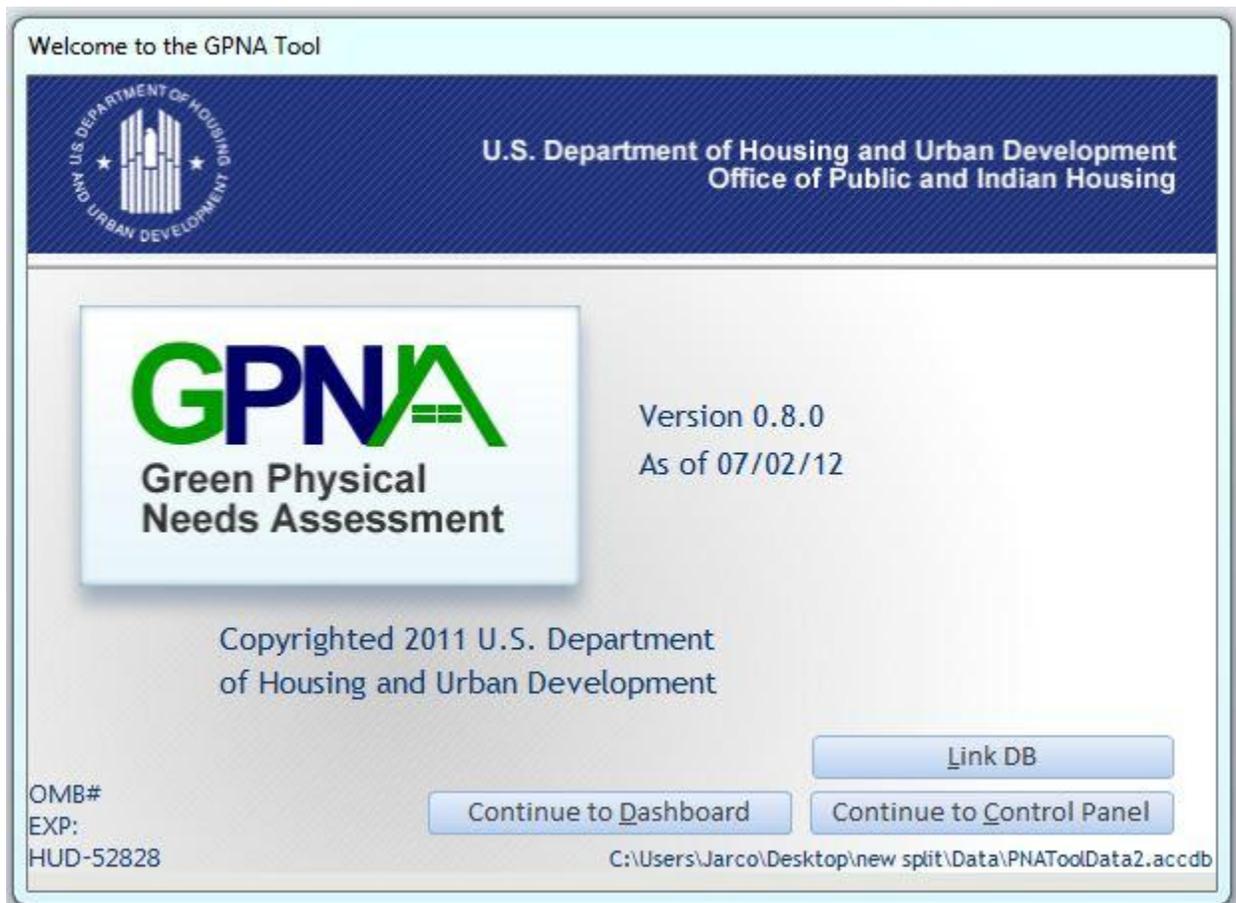
A copy of the GPNA Tool Database file should now appear in the recently-created New Folder*



Note: The Continue to Dashboard and Continue to Control Panel buttons are initially disabled until the Client Install Pack is linked to the shared Database.

To access the shared Database from your local computer;

- 1) Open the locally installed Client Install Pack – the above splash page appears.
- 2) Select on the Link DB button to configure access to the Database.
- 3) A Browse Files window appears – navigate to the available networked or other shared drive and select on the previously downloaded Database.
- 4) You will be automatically redirected to the same HUD GPNA tool splash page. However, the **Continue to Dashboard** and **Continue to Control Panel** buttons should now be enabled.



PHASE 1: Pre-Assessment – Preparing for the GPNA

Quick Steps

Phase 1 of the GPNA focuses on preparation and pre-assessment. The following overview presents the steps involved in preparing for a GPNA:

- 1) Identify qualified staff to perform the GPNA
- 2) Download PHA specific PIC data information from the HUD website
- 3) Verify Inventory Management System-Public and Indian Housing Information Center (IMS-PIC) data, correct if necessary
- 4) Organize PHA data and identify architectural take-offs, measurements, and counts
Input any preliminary data into the GPNA tool prior to the Walk Through
- 5) Determine sampling size and select units for the representative sample
- 6) Notify residents of their units' inclusion in the GPNA process

Please keep in mind that help is only a click away! Look for this icon  to access brief explanations and instructions about various GPNA tool functions.

Identify Qualified Staff to Perform the GPNA

Selecting the appropriate staff ensures the success of your GPNA. You can choose to have either qualified PHA staff or a third party assessor to perform the GPNA.

If you choose to utilize a third party assessor, remember to start the procurement and selection process several months prior to your assessment completion target date. For your convenience, a sample RFP for 3rd Party Assessors is located in Appendix B.

If you choose to use PHA staff to conduct the GPNA, you may consider delegating specific tasks to various staff members based on their individual knowledge and skill level. This includes assigning a data entry staff to enter GPNA data values into the tool during the PNA process.

Examples of staff qualifications are listed below:

Persons employed by the PHA, with five or more years of direct practical experience in facility assessment and cost estimating experience are considered qualified persons.

Third-party assessors are also considered qualified persons, and include:

- Registered architects and engineers
- Certified home energy raters
- Code inspectors
- Construction managers
- Certified building cost estimators

All qualified persons should have knowledge and experience in the following areas:

- Building systems, health and safety conditions, and physical and structural conditions
- Providing cost estimates for maintaining, rehabilitating, or improving deficiencies for all components
- Estimating the remaining useful life of components based upon a physical inspection
- Building standards and codes, (i.e., federal, state, and local requirements)
- Environmental hazards
- Accessibility requirements
- Green principles - through training, certification, or experience such as through direct involvement in the implementation of an Energy Performance Contract EPC
- Computer and data entry skills to input assessment data into the GPNA tool

Utilizing Staff Knowledge

A PHA staff's historical knowledge on property conditions contributes significantly to the thoroughness of a GPNA. PHAs should consider an interview process to capture data from knowledgeable staff prior to the walk-through survey.

A thorough interview should inquire about:

- The Development/AMP's historical repairs and replacements and their costs
- The level of preventive maintenance exercised
- Any pending repairs and improvements
- The frequency of repairs and replacements
- The ongoing systemic issues related to the Development/AMP's physical condition

Download PIC Data from the HUD website

To download your PIC data,

- 1) Go to www.hud.gov.
- 2) Select “download PNA tool.” (This may take a few minutes).
- 3) Next navigate to the appropriate state of your PHA,
- 4) Select your state and PHA.
- 5) Select “download PIC data.”
- 6) Save this XML document to an easily-accessible location on your computer

The download timeframe may range from five to thirty minutes, and varies based on the number of developments/AMPS contained in the PIC data.

Verify PIC Data

One of the most important steps to successfully submitting your PNA data is ensuring PIC data accuracy at the very beginning of the PNA process. If your PIC data is not correct in the tool, do not proceed at this time. You must make changes within PIC, and then re-download your data.

Once you have downloaded PIC data and verified that all data is correct, you may proceed with Importing PIC Data into your GPNA tool.

Import PIC Data

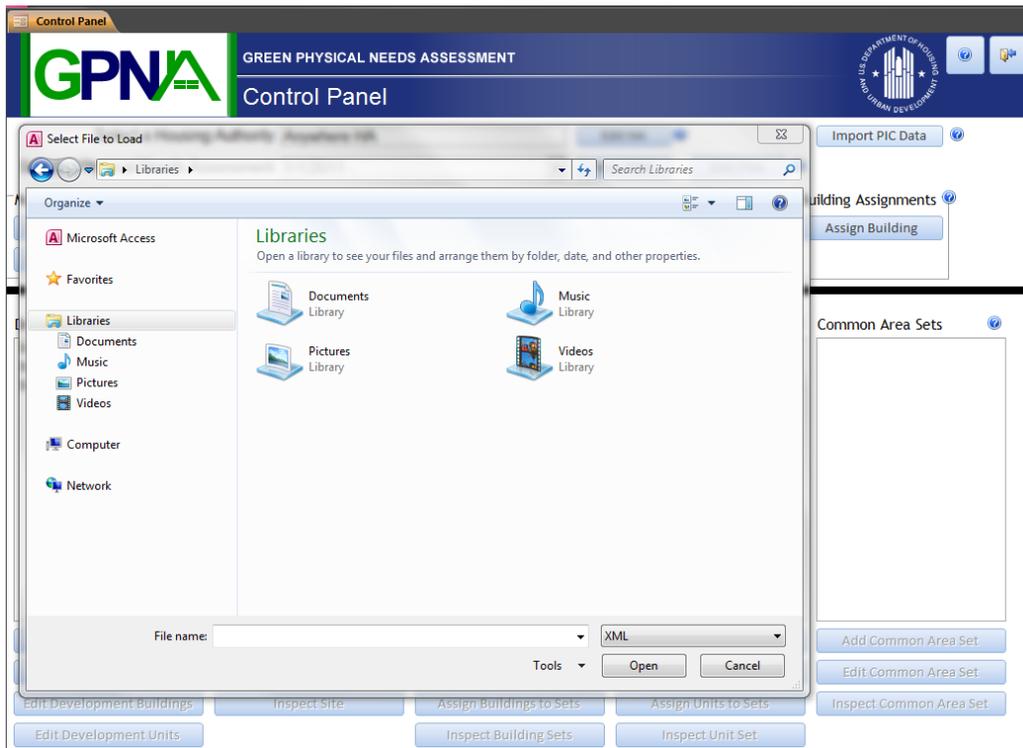
Once you have successfully downloaded and reviewed HUD PIC data on your computer, you must import the PIC Data into your GPNA tool. This import process will fill in the HA, Project, Building and Unit information for one PNA.

To import PIC data into the GPNA tool:

- 1) Start in the Control Panel,
- 2) Select on the Import PIC Data button- located at the top of the screen.



- 3) Use the pop-up window to browse local files on your computer and identify the PIC data XML file to be imported into your GPNA tool



- 4) Select on the desired PIC data file and Select Open
The Import process should start automatically.
Once the Import process is complete, your GPNA tool should be populated with PIC data containing all developments/AMPs and buildings for your PHA. You will find the Development/AMP and Building data sets labeled accordingly in the Control Panel.

Edit a Housing Authority (HA)

Note: Use this function to edit the PHA location or ED information ONLY. You must perform all other edits in PIC.

To edit a HA:

- 1) Start in the Control Panel,

- 2) Select the desired HA from the **Select a Housing Authority** field

Note: If your Housing Authority is not displayed here then you likely have the wrong version and will need to repeat the previous process to download the correct copy.

- 3) Click the **Edit HA** button - The Housing Authority screen appears.

Edit the following fields, as appropriate:

- **PHA: Name and PHA Code** (Cannot be edited from here)
- **PHA Location: Address 1 and 2, City, State, and Zip**
- **PHA ED Contact Data: Executive Director, Email, and Phone**

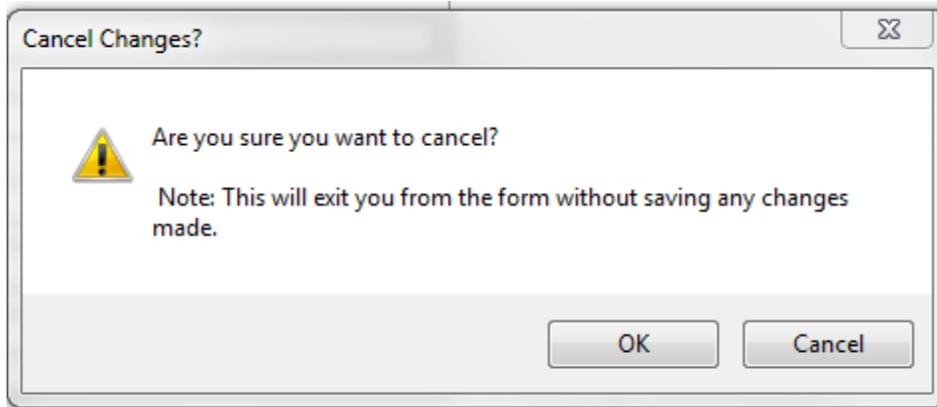
At this point, you may choose to Save or cancel edits made to this Housing Authority, or you may choose to delete this Housing Authority from your GPNA.

To Save Edits made to this HA,

Select on the Save button - You will be automatically redirected to the Control Panel.

To cancel edits made to this HA,

- 1) Select on the Cancel button – the following pop-up appears



- 2) Select Ok to confirm the Cancel and return to the Control Panel.
Select Cancel to return to the Edit HA screen and continue making edits

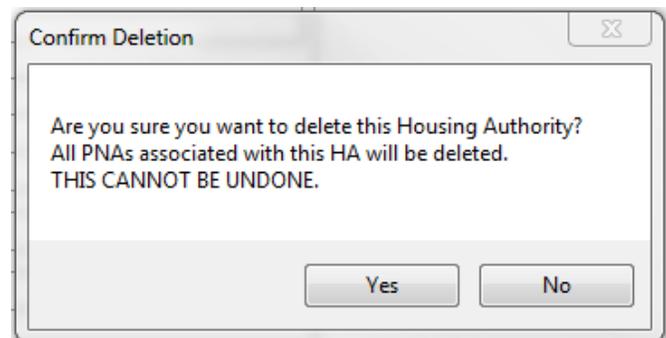
To delete a Housing Authority,

From the Housing Authority screen, Select the Delete button – the following pop-up appears

Select Yes to confirm the Delete and return to the Control Panel

Note: THIS CANNOT BE UNDONE

Select No to cancel the Delete and return to the Edit HA screen.



Edit a Green Physical Needs Assessment (GPNA)

To edit a GPNA:

- 1) Start in the Control Panel,
- 2) Choose a GPNA assessment date from the **Select a Physical Needs Assessment** field

When you launch the tool for the first time, you will see that a PNA with the date of 1/1/2011 has been created. Edit this date so that it reflects the date of your first PNA.

Note: To create additional GPNAs, click the **New PNA** button and proceed to step 4 of this procedure. Remember that adding a new GPNA copies data from the previous GPNA. Therefore, you **MUST** make sure your current GPNA is completed and saved before creating a new GPNA.

- 3) Click the **Edit PNA** button.

The Physical Needs Assessment screen appears.

Edit the following fields, as appropriate:

- **PNA General Info:** PNA Description and Date
- **PNA Provider Data:** PNA provider name, street address, email, phone
- **Energy Audit Data:** Date and Provider name

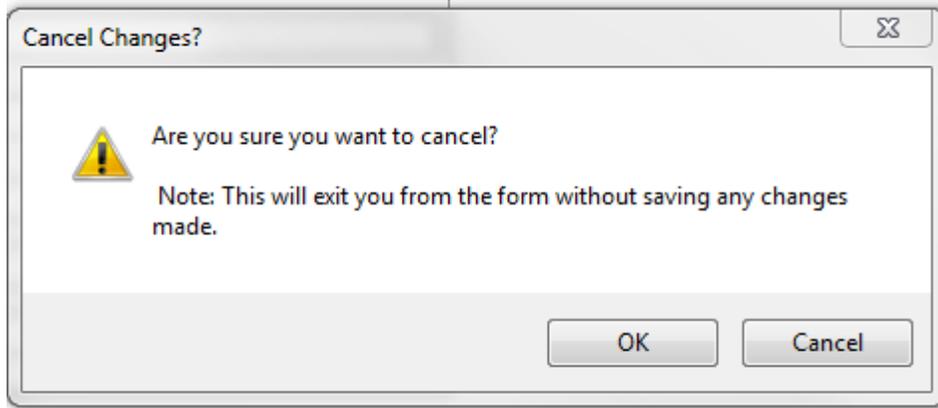
At this point, you may choose to Save or cancel edits made to this PNA, or you may choose to delete this PNA from your GPNA.

To Save edits made to this PNA,

Select on the Save button – you will be automatically redirected to the Control Panel,

Or, to Cancel edits made to this PNA,

- 1) Select on the Cancel button – the following pop-up will appear



- 2) Select Ok to confirm the Cancel and return to the Control Panel

Note: This will discard any changes you made to the PNA

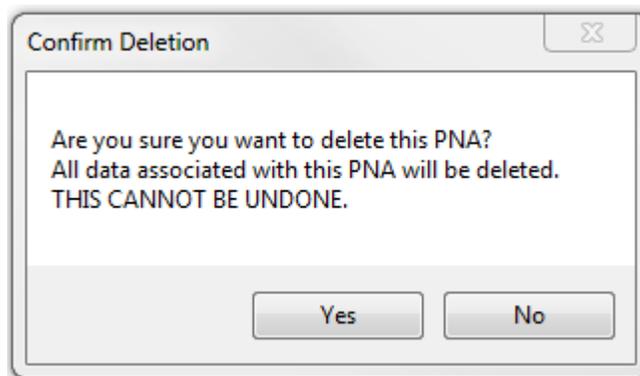
Select Cancel to return to the Edit PNA screen and continue editing this PNA

Or, to Delete this PNA,

- 1) Select on the Delete button – the following pop-up will appear
- 2) Select Yes to confirm the Delete and return to the Control Panel.

Note: This CANNOT BE UNDONE

Select No to cancel the Delete and return to the Edit PNA screen.



Organize Data

Use the procedures in this section to add, review, and edit pre-assessment data in the GPNA tool. Pre-assessment data includes baseline and take-off data which are then prepopulated into inspection forms to be used during the walkthrough assessment. These inspection forms are available for printing or for use on an electronic device. Inputting data during this phase of the GPNA may reduce the overall data entry burden for the GPNA. A PHA may choose to dedicate staff to the pre-assessment data entry task.

This step of the pre-assessment data collection focuses on the site, buildings, unit physical characteristics, and measurements that will be recorded in the GPNA tool. Architectural data refers to the physical measurements of the specific property for which the GPNA is being conducted. Not all of this data will be readily available on documents held by PHAs. Portions of the required data will require field observations and measurements. Available PHA resources are as follows:

- **Blueprints or “to scale” drawings**—Documents such as elevations, mechanicals, etc. that include the site, dwelling and non-dwelling buildings, and units
- **Site Maps**—Copies of development site maps
- **504 Transition Plan**—Review the most up-to-date (annually updated) plan. The purpose of obtaining the plan is to record improvements remaining to be completed as reported by the PHA.
- **Energy Audit**—a copy of the PHA’s most recent energy audit, including utility consumption data, recommended energy conservation measures (ECMs), and projected savings based on implementation of those measures.
- **Energy Performance Contract**—if the PHA has entered into an energy performance contract, the contract and its performance status should be reviewed to determine its impact on implementation of energy conservation measures.
- **Green Data**—PHAs that have participated in various green programs should have documentation on green initiatives. Information on affected building systems and components may be identified.
- **Physical Needs Assessment**—A copy of the last assessment, provides historical data that should be used in formulating the currently scheduled GPNA.
- **UPCS Annual Inspection Reports**—assist the GPNA team in identifying modernization items.
- **PHAS, PASS, and MASS Reports**
- **REAC Report(s)**
- **Resident Complaint Reports, Resident Meeting Reports, and Resident Questionnaires**
- **HUD Review Reports, Recommendations, Improvements, and Findings**
- **Major Current Bid Estimates, i.e., Major Structural Work, Boiler Replacement, Playground Replacement, etc.**

- **Maintenance Records and Maintenance Plan**
- **Environmental Reports**—Lead-based paint and asbestos testing and abatement reports. Review of these reports will help determine what testing and abatement that may be needed by the agency with results to be recorded in the GPNA tool.
- **Architect and Engineer Reports**
- **Capital Fund Performance and Evaluation (P&E) Reports for the last five years.**

It is very important to confirm that available architectural plans accurately represent buildings and units. For example, if two zero-bedroom units were combined in a previous modernization, this information should be taken into account to provide accurate take-off data values.

Prior to the actual survey but after assembling all available resource documents for which there are architectural take-offs, measurements, and component counts, you can record data in the GPNA tool. In cases where data is unavailable, data fields can be left blank and completed during the onsite survey.

In some cases, actual quantities may not be available but rather may need to be estimated. Estimates are acceptable for those instances where building plans are unavailable for pre-assessment architectural take-offs or for concealed conditions. However, this does not replace the need for physical take-off data during the assessment process. The best information available should be recorded in your GPNA tool.

Regarding concealed conditions, professional judgment in estimation is appropriate for such systems (for example plumbing pipes, electrical wiring, etc.). The presence of the component and condition of the component can be determined based on interviews with on-site personnel (typically maintenance personnel).

Add a Site

In some cases a development may have multiple sites with multiple locations. PIC does not have this information in its system. Therefore, it may be necessary to break down the number of sites you have within each of your development/AMP(s).

The New Site page is used to input pre-assessment data for a particular site within a Development/AMP. Site data includes the name and street location for a site along with a square-footage breakdown of the different areas within a site such as the parking area, playground area, tennis and basketball court areas, etc.

To add a Site to a Development/AMP:

- 1) Start in the Control Panel,

The screenshot shows the GPNA Control Panel interface. At the top, there is a navigation bar with the GPNA logo and the text 'GREEN PHYSICAL NEEDS ASSESSMENT Control Panel'. Below this, there are several dropdown menus and buttons for selecting a Housing Authority, Physical Needs Assessment, and Master Cost Library. The main content area is divided into five columns: Development/AMPs, Sites, Building Sets, Unit Sets, and Common Area Sets. The 'Development/AMPs' column contains a list of development IDs (Dev12345, Dev2468, Dev98765) and an 'Add Site' button. The 'Sites' column contains a list of site names (Site 1, site 2) and an 'Add Site' button. The other columns are empty. Below the columns, there are several buttons for editing and adding data to each column.

- 2) Select the desired Development/AMP to which you want to add a Site from the Development/AMPs column
- 3) Click on the Add Site button – located below the Site column

Note: You must first select a Development from the Development/AMPs column to enable the Add Site button

The New Site screen appears.

Site Data

Development/AMP: Dev12345

Site Name:

Address 1:

Address 2:

City:

State:

Zip:

Take-off Data

Gross Property Area: 0 SF

Gross Parking Area: 0 SF

Gross Paved Pedestrian Area: 0 SF

Gross Playground Area: 0 SF

of Tennis Courts: 0

of Basketball Courts: 0

Avg. Tennis Area: 0 SF

Avg. Basketball Area: 0 SF

Cancel Save & Close

Complete the following Site Data fields:

- **Site Name,**
- **Address,**
- **City,**
- **State,**
- **Zip**

Site Data

Development/AMP: Dev12345

Site Name:

Address 1:

Address 2:

City:

State:

Zip:

In the Take-off Data portion of the New Site screen, enter the pre-assessment take-off measurements as appropriate (it should be noted that the information gathered for take-off data is done during the Pre-Assessment to load the inspection form and also the Conversion Calculator that follows may assist in the conversion of units of measurements.):

Take-off Data		
Gross Property Area:	<input type="text" value="0"/>	SF
Gross Parking Area:	<input type="text" value="0"/>	SF
Gross Paved Pedestrian Area:	<input type="text" value="0"/>	SF
Gross Playground Area:	<input type="text" value="0"/>	SF
# of Tennis Courts:	<input type="text" value="0"/>	
# of Basketball Courts:	<input type="text" value="0"/>	
Avg. Tennis Area:	<input type="text" value="0"/>	SF
Avg. Basketball Area:	<input type="text" value="0"/>	SF

- **Gross Property Area:** Enter the area, in square feet, for all of the property area within the property’s boundary.
- **Gross Parking Area:** Enter the area, in square feet, for all parking locations within the property’s boundary.
- **Gross Paved Pedestrian Area:** Enter the total area, in square feet, for all paved walkways and patios.
- **Gross Playground Area:** Enter the total area, in square feet, of the playground surfacing within the property’s boundary.
- **# of Tennis Courts:** Enter the number of tennis courts within the property’s boundary.
- **# of Basketball Courts:** Enter the number of basketball courts within the property’s boundary.
- **Avg. Tennis Area:** Enter the average square footage of the tennis courts within the property’s boundary.
- **Avg. Basketball Area:** Enter the average square footage of the basketball courts within the property’s boundary.

Click the **Save & Close** button.

The new Site appears under the Site column in the Control Panel.

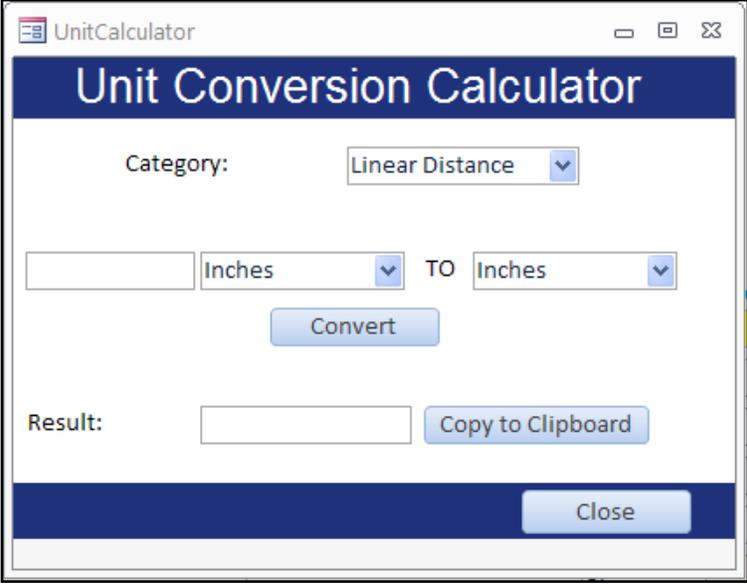
Unit Conversion Calculator

The Unit Conversion Calculator is used to convert the units of GPNA measurements and take-off data. The conversion units include linear distance, area, energy, and liquid volume.

To use the Unit Conversion Calculator:

- 1) From any of the Inspection screens or the Cost Library screen, click the Unit Conversion Calculator  located at the top-right corner of the screen.

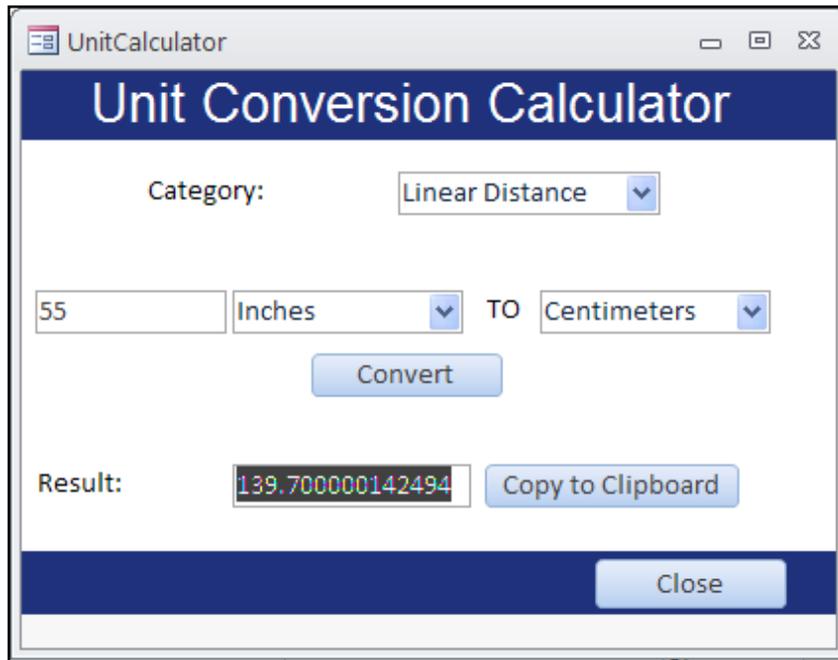
The Unit Conversion Calculator screen appears.



The screenshot shows a window titled "UnitCalculator" with a dark blue header containing the text "Unit Conversion Calculator". Below the header, there is a "Category:" label followed by a dropdown menu currently showing "Linear Distance". Underneath, there is a text input field, followed by a dropdown menu showing "Inches", the word "TO", another dropdown menu showing "Inches", and a "Convert" button. At the bottom of the main area, there is a "Result:" label, a text input field, and a "Copy to Clipboard" button. A "Close" button is located at the bottom right of the window.

- 2) Select the type of measurement from the **Category** drop-down.
- 3) Enter the measurement data in the blank field above the Convert button.
- 4) Select the original units for the measurement from the drop-down menus.
- 5) Click the **Convert** button.

The new measurement appears in the Result field.



- 6) Click the **Copy to Clipboard** button to copy the result.
- 7) Click the **Close** button.
- 8) When the Inspection or Cost Library screen appears, click the **Ctrl + V** keys to paste the result in the Description column for the appropriate line item.

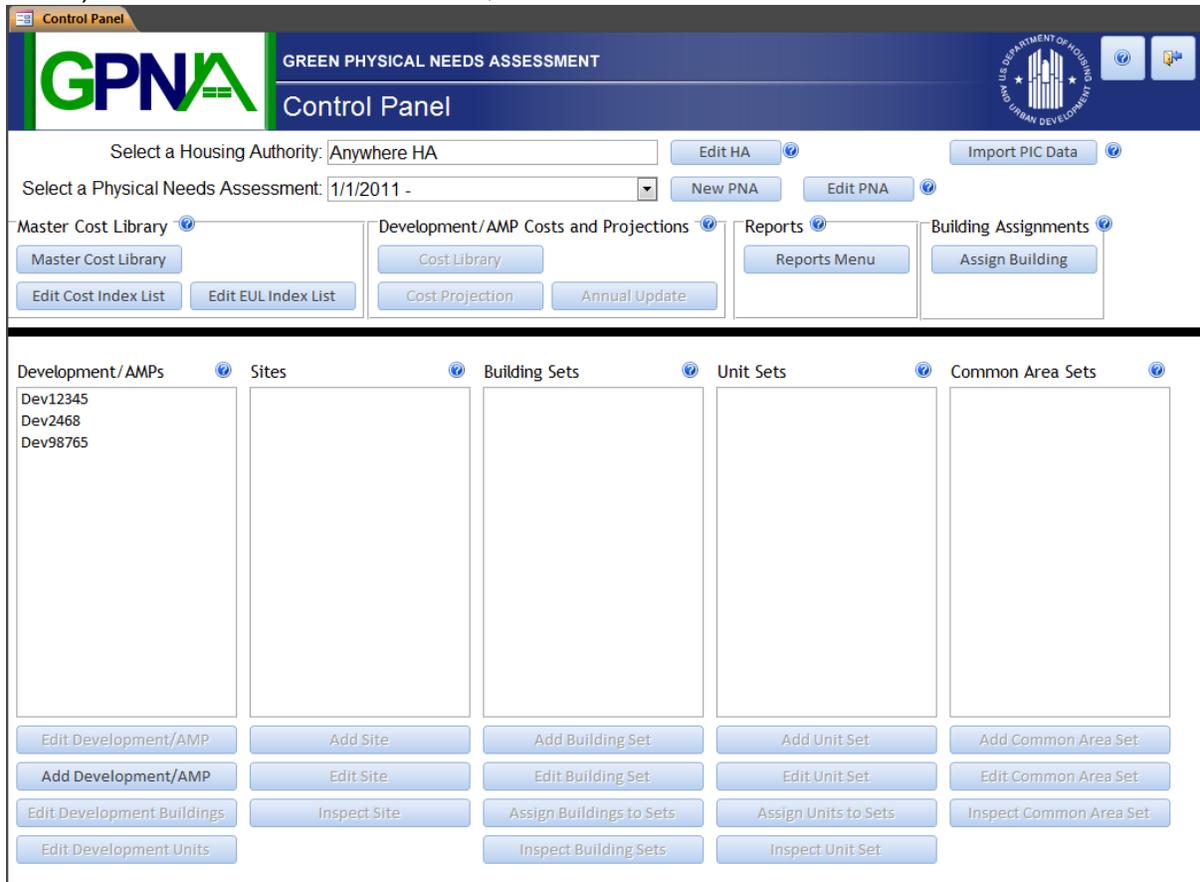
Line Item	Description	Unit of Measure
Green Item		LF
Marketability Item		LF
Accessibility Item		LF
Chain Link	139.700000142494	LF

Add a Building Set

A Building Set is a collection of buildings belonging to a single Site which share characteristics, such as footprint, area, perimeter, height, and stories. The New Building Set screen is used to input pre-assessment data for a particular set of buildings within a Site.

To add a Building Set to a Site:

- 1) Start in the Control Panel,



- 2) Select the desired Development/AMP from the Development/AMPs column

Development/AMPs	Sites	Building Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	

Edit Development/AMP	Add Site	Add Building Set
Add Development/AMP	Edit Site	Edit Building Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets
Edit Development Units		Inspect Building Sets

- 3) Select the desired Site from the Sites column

Development/AMPs	Sites	Building Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set Non-Baseline Bldg Set

Edit Development/AMP	Add Site	Add Building Set
Add Development/AMP	Edit Site	Edit Building Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets
Edit Development Units		Inspect Building Sets

4) Click the **Add Building Set** button under the Building Sets column.

Note: You must first select a Site from the Sites column to enable the Add Building Set button

The New Building Set screen appears.

Building Set Name - enter a name for this New Building Set

Structure Type - Select a structure type from the drop-down menu

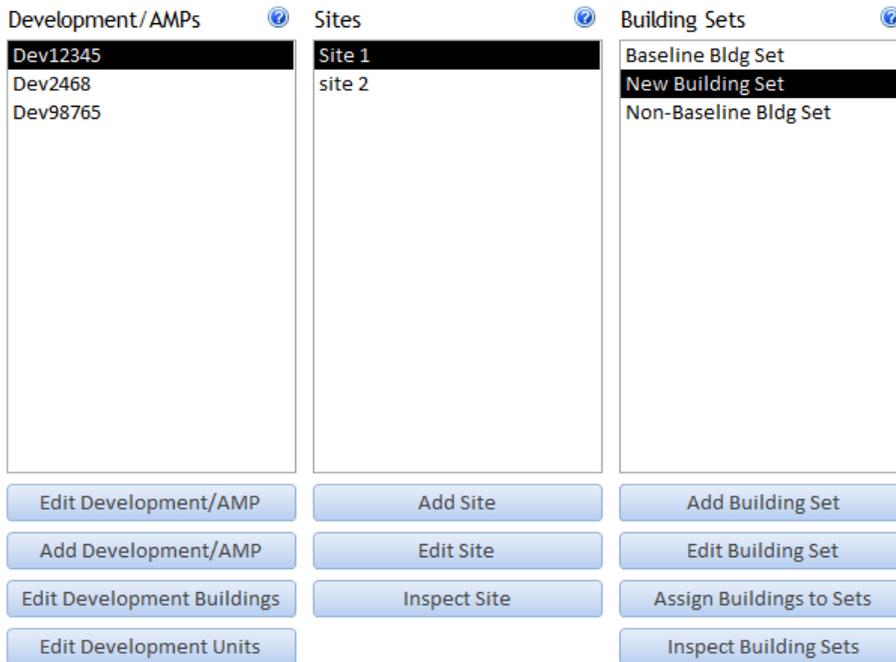
Footprint, Area, Perimeter, Average Height, Stories - Enter the square footage and length information for the buildings in this New Building Set

Available Buildings - Assign any available buildings to this set using the arrows to move selected buildings between the **Available Buildings** and **Buildings in this Set** columns. Unassigned buildings that match the structure type appear in the Available Buildings column.

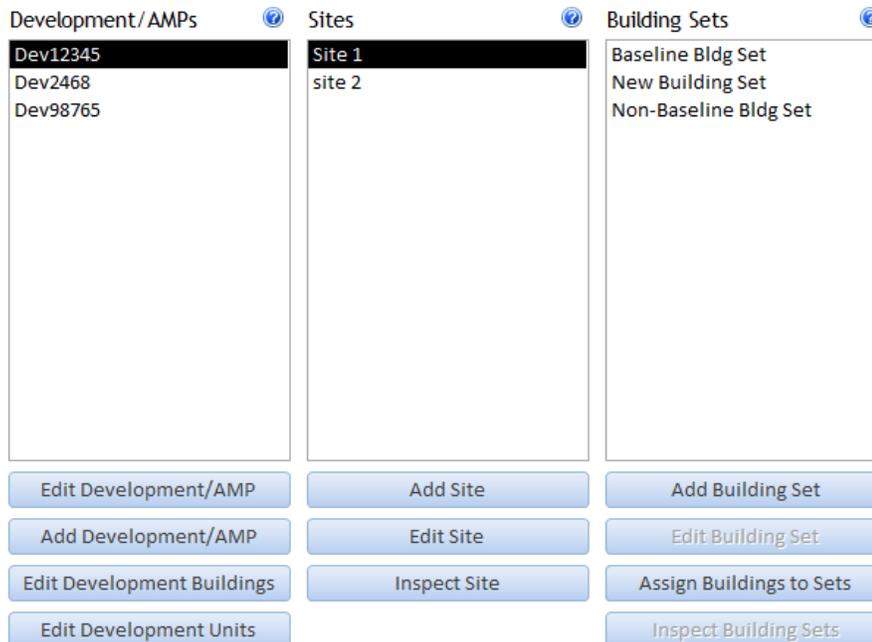
The exception is the Non-Dwelling Structure type. If this is selected, both list boxes will be disabled and the number of buildings in the Building Set will need to be entered manually.

Click the **Save & Close** button.

You will be automatically redirected to the Control Panel screen and the new Building Set will appear in the Building Sets column.

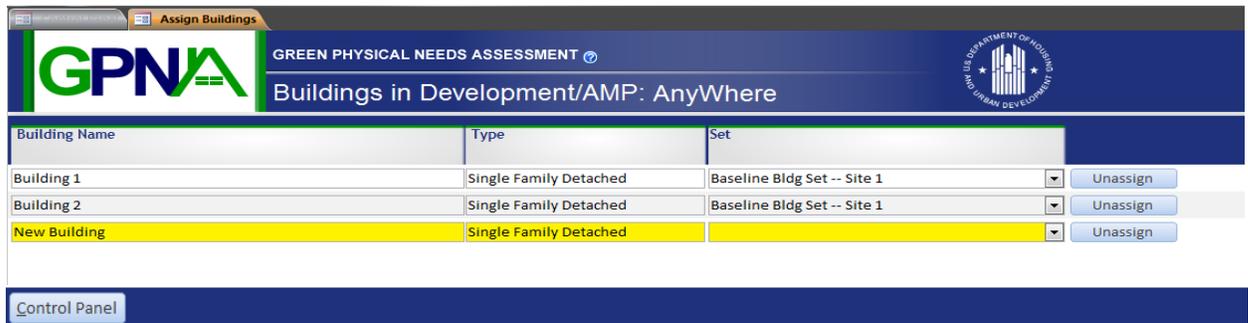


Click the **Assign Buildings to Sets** button under the Building Sets column of the Control Panel.



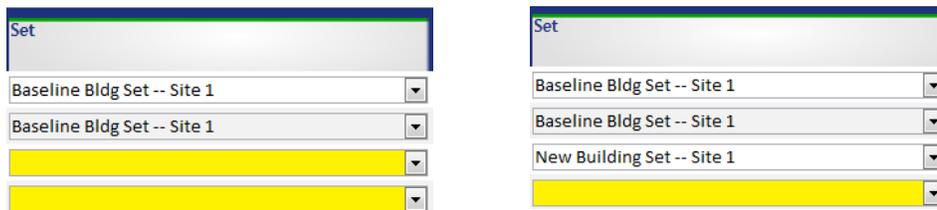
Note: it is not necessary to select a Building Set from the Building Sets column to enable the Assign Building to Sets button

The Buildings in Development/AMP screen appears.



This screen provides a broader view of all buildings in the Development/AMP. This Assign Buildings to Sets screen is most useful in helping you find buildings you may have overlooked during the Building Set creation process earlier in this procedure. Unassigned buildings are highlighted in yellow.

Assign any unassigned buildings highlighted in yellow to building sets by selecting the appropriate building set from the Set drop-down menu



Click on the **Control Panel** button when you are finished to return to the Control Panel and continue editing building sets

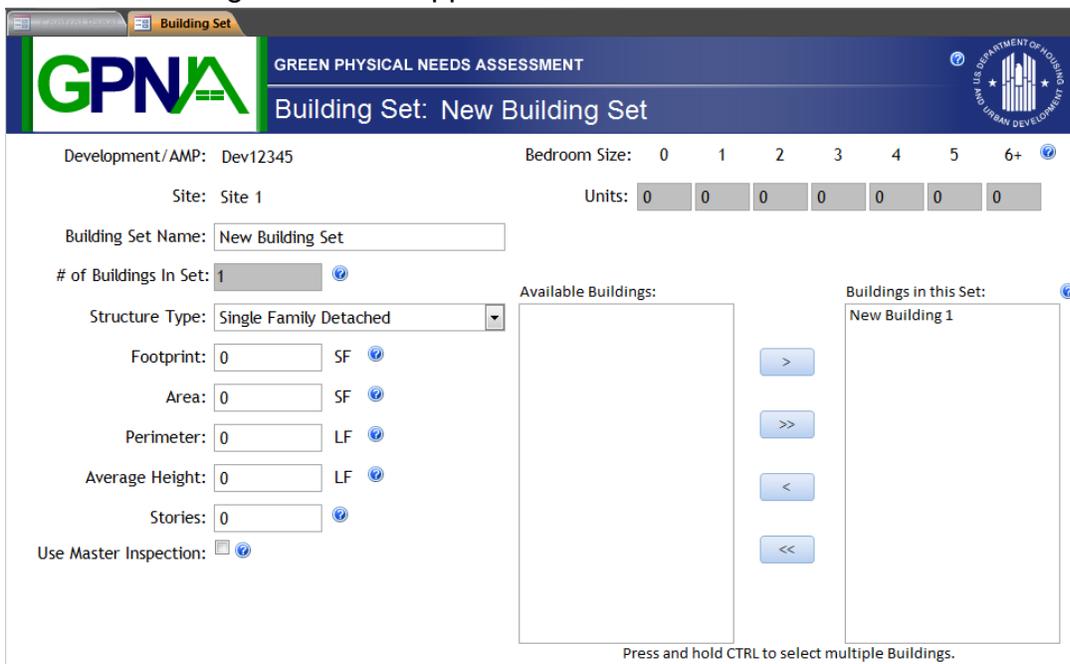


To Edit building Sets,

- 1) Select on your New Building Set from the Building Sets column and click on the **Edit Building Set** button.

Development/AMPs	Sites	Building Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set
<input type="button" value="Edit Development/AMP"/>	<input type="button" value="Add Site"/>	<input type="button" value="Add Building Set"/>
<input type="button" value="Add Development/AMP"/>	<input type="button" value="Edit Site"/>	<input type="button" value="Edit Building Set"/>
<input type="button" value="Edit Development Buildings"/>	<input type="button" value="Inspect Site"/>	<input type="button" value="Assign Buildings to Sets"/>
<input type="button" value="Edit Development Units"/>		<input type="button" value="Inspect Building Sets"/>

The Edit Building Set screen appears –



Development/AMP: Dev12345 Bedroom Size: 0 1 2 3 4 5 6+

Site: Site 1 Units: 0 0 0 0 0 0 0

Building Set Name: New Building Set

of Buildings In Set: 1

Structure Type: Single Family Detached

Footprint: 0 SF

Area: 0 SF

Perimeter: 0 LF

Average Height: 0 LF

Stories: 0

Use Master Inspection:

Available Buildings: Buildings in this Set: New Building 1

Press and hold CTRL to select multiple Buildings.

Phase 1: Pre-Assessment – Preparing for the GPNA

You may notice some fields have been pre-populated with data based on selections made in step 10 of this instruction set, including Number of Buildings in Set, number of Units, and Buildings in this Set.

Take time to review Building Set data and make any necessary changes to the selected Building Set's Footprint, Area, Perimeter, Average Height, and Stories.

Once you have finished making changes to this Building Set, Select on the **Save & Close** button to return to the Control Panel.

Development/AMP: Dev12345

Site: Site 1

Building Set Name:

of Buildings In Set: ⓘ

Structure Type: ▼

Footprint: SF ⓘ

Area: SF ⓘ

Perimeter: LF ⓘ

Average Height: LF ⓘ

Stories: ⓘ

Identify Sample Size to Create Unit Sets

A Unit Set refers to an established grouping of Unit areas within a Building, which share characteristics, such as: number of bedrooms, number of full and half baths, ceiling height, and floor area.

In order to achieve a truly representative sample, several factors must be considered in determining how many and which units to include in your sample. A few sampling methods are described below.

Dwelling Units

Sample a minimum of 10% of the units in a given development, or more than 10% if required to achieve a representative sample of the dwelling units. Include each type such as:

- Unit size, e.g., one-, two-, and three-bedrooms,
- Square footage
- Unit types in typical buildings such as row houses, duplexes, single family, etc.

You should also consider surveying those units that are more subject to architectural stress, such as:

- Ground floor units
- Units on the top floor directly under the roof
- Units adjacent to elevator cores
- Units on the sides of the building subject to the most weathering

In some cases, PHAs may be required to survey as much as 30%-40% or more of the units for any given development. Within the tool, break up the units into similar sets to ease the burden of determining the sampling size.

Example #1

Development A has 100 one-bedroom dwelling units with the same floor plan. The sampling size is 10% of total units. 10% of 100 units is equal to 10 units.

Example #2

Development B has 100 units:

- 25 with one bedroom
- 50 with two bedrooms and two different floor plans (25 units for each floor plan)
- 25 with three bedrooms

The sampling size is 10% of each type of unit. 10% of 25 one-bedroom units is equal to 2.5, or 3 whole units. Performing similar calculations for the other bedroom types yields a total sampling size of 12% of the total units.

The appropriate sample size for this development is 12 units with the following inspection requirements:

- 3 one-bedroom unit
- 3 two-bedroom unit in floor plan #1
- 3 two-bedroom unit in floor plan #2
- 3 three-bedroom unit

Example #3

Development C has 10 units:

- 3 one-bedroom units
- 3 two-bedroom units
- 4 three-bedroom units

This development has only 10 units; however it has 3 different unit types. In this case, you need three unit inspections to meet minimum requirements for sampling, including a unit of each bedroom size. Accordingly, the appropriate sample size for this development is 3 units or 30% of total units for this development:

- 1 one-bedroom unit
- 1 two-bedroom unit
- 1 three-bedroom unit

Identify the Sample Size for Non-Dwelling Spaces, Multiple Building, or Scattered Units

You may consider surveying all non-dwelling spaces and multiple building, but at least 50% should be surveyed if conditions are known to vary. If all such spaces are known to be in the same condition, survey at least 20% of the total.

In the case of scattered units, PHAs should consider assessing at least 50% should the conditions vary, and if such units are known to be in the same condition, survey at least 20% of the total. PHAs may exceed this minimum if they determine it is necessary to derive a statistically valid sample.

Add a Unit Set

A Unit Set is a collection of common areas within a building which share characteristics such as the number of bedrooms, number of full and half baths, ceiling height, and floor area.

The New Unit Set page is used to input pre-assessment data for a particular set of units within a building.

To add a Unit Set to a Building:

- 1) Start in the Control Panel,

The screenshot displays the GPNA Control Panel interface. At the top, there is a header with the GPNA logo and the text 'GREEN PHYSICAL NEEDS ASSESSMENT Control Panel'. Below the header, there are several input fields and buttons for managing data. The main area is divided into five columns, each representing a different category of data: Development/AMPs, Sites, Building Sets, Unit Sets, and Common Area Sets. Each column contains a list of items and a set of buttons for adding, editing, and inspecting those items.

Development/AMPs	Sites	Building Sets	Unit Sets	Common Area Sets
Dev12345 Dev2468 Dev98765				
Edit Development/AMP	Add Site	Add Building Set	Add Unit Set	Add Common Area Set
Add Development/AMP	Edit Site	Edit Building Set	Edit Unit Set	Edit Common Area Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets	Assign Units to Sets	Inspect Common Area Set
Edit Development Units		Inspect Building Sets	Inspect Unit Set	

2) Select the desired Development/AMP from the Development/AMPs column

Development/AMPs	Sites	Building Sets	Unit Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2		
Edit Development/AMP	Add Site	Add Building Set	Add Unit Set
Add Development/AMP	Edit Site	Edit Building Set	Edit Unit Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets	Assign Units to Sets
Edit Development Units		Inspect Building Sets	Inspect Unit Set

3) Select the appropriate Site from the Sites column

Development/AMPs	Sites	Building Sets	Unit Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set	
Edit Development/AMP	Add Site	Add Building Set	Add Unit Set
Add Development/AMP	Edit Site	Edit Building Set	Edit Unit Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets	Assign Units to Sets
Edit Development Units		Inspect Building Sets	Inspect Unit Set

4)

5) [Edit Development/AMP](#)

6) [Add Development/AMP](#)

7) [Edit Development Buildings](#)

8) [Edit Development Units](#)

4) Select the desired Building Set from the Building Set column

Development/ AMPs	Sites	Building Sets	Unit Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set	
<input type="button" value="Edit Development/AMP"/>	<input type="button" value="Add Site"/>	<input type="button" value="Add Building Set"/>	<input type="button" value="Add Unit Set"/>
<input type="button" value="Add Development/AMP"/>	<input type="button" value="Edit Site"/>	<input type="button" value="Edit Building Set"/>	<input type="button" value="Edit Unit Set"/>
<input type="button" value="Edit Development Buildings"/>	<input type="button" value="Inspect Site"/>	<input type="button" value="Assign Buildings to Sets"/>	<input type="button" value="Assign Units to Sets"/>
<input type="button" value="Edit Development Units"/>		<input type="button" value="Inspect Building Sets"/>	<input type="button" value="Inspect Unit Set"/>

5) Click the **Add Unit Set** button under the Unit Sets column.

Note: It is not necessary to select a Unit Set from the Unit Sets column to enable the Add Unit Set button

The New Unit Set screen appears



GREEN PHYSICAL NEEDS ASSESSMENT

Unit Set: New Unit Set



Development/AMP: HA12345

Site: Site 1

Building Set: Building Set 1

Unit Set Name:

Units In Set:

Bedrooms:

Full Baths:

Half Baths:

Average Ceiling Height: LF

Floor Area: SF

Available Units:

Units in this Set:

Phase 1: Pre-Assessment – Preparing for the GPNA

Development/AMP: Dev12345

Site: Site 1

Building Set: New Building Set

Unit Set Name:

Units In Set: ⓘ

Bedrooms: ⓘ

Full Baths: ⓘ

Half Baths: ⓘ

Average Ceiling Height: LF ⓘ

Floor Area: SF ⓘ

Enter a name for the unit set in the **Unit Set Name** field.

Enter the number of **Full Baths**, **Half Baths**, **Average Ceiling Height**, and **Floor Area** in the relevant fields.

Assign any available units to this set using the **Available Units** and **Units in this Set** list boxes. Unassigned Units appear in the **Available Units** list box.

Use the arrow buttons to move selected buildings between the **Available Units** and **Units in this Set** list boxes.

The screenshot shows the unit assignment interface. On the left is an empty box labeled "Available Units:". On the right is a box labeled "Units in this Set:" containing three entries: "Unit 1 - Unit 1 address", "Unit 2 - Unit 2 address", and "Unit 3 - Unit 3 address". Between the boxes are four arrow buttons: a single right arrow (>), a double right arrow (>>), a single left arrow (<), and a double left arrow (<<). Below the boxes, the text "Press and hold CTRL to select multiple units." is displayed. To the right of this interface is a "Unit Sets" panel with a search icon and a list containing "New Unit Set". Below the list are four buttons: "Add Unit Set", "Edit Unit Set", "Assign Units to Sets", and "Inspect Unit Set".

Once you have finished, click the **Save & Close** button.

The new Unit Set appears in the Unit Sets column of the Control Panel.

To assign units to this new Unit Set, Click the **Assign Units to Sets** button under the Unit Sets column of the Control Panel.

The Control Panel is divided into four main sections, each with a list of items and a set of buttons below:

- Development/ AMPs:** Contains 'Dev12345', 'Dev2468', and 'Dev98765'. Buttons include 'Edit Development/AMP', 'Add Development/AMP', 'Edit Development Buildings', and 'Edit Development Units'.
- Sites:** Contains 'Site 1' and 'site 2'. Buttons include 'Add Site', 'Edit Site', and 'Inspect Site'.
- Building Sets:** Contains 'Baseline Bldg Set', 'New Building Set', and 'Non-Baseline Bldg Set'. Buttons include 'Add Building Set', 'Edit Building Set', 'Assign Buildings to Sets', and 'Inspect Building Sets'.
- Unit Sets:** Contains 'New Unit Set'. Buttons include 'Add Unit Set', 'Edit Unit Set', 'Assign Units to Sets', and 'Inspect Unit Set'.

Note: It is not necessary to first select a Unit Set to enable the Assign Units to Sets button

The Assign Units to Sets or the Units in Development/AMP screen appears -

The 'Assign Units' screen displays a table of units in development/AMP. The table has the following structure:

Unit Name	Bedrooms	Set	
New Unit - add	10	Baseline Unit Set -- Baseline Bldg Set -- Site 1	Unassign
Unit 1 - Unit 1 address	1	Baseline Unit Set -- Baseline Bldg Set -- Site 1	Unassign
Unit 2 - Unit 2 address	1	Baseline Unit Set -- Baseline Bldg Set -- Site 1	Unassign
Unit 3 - Unit 3 address	1	Baseline Unit Set -- Baseline Bldg Set -- Site 1	Unassign
Unit 4 - Unit 4 address	1		Unassign
Unit 5 - Unit 5 address	1		Unassign
Unit 6 - Unit 6 address	1		Unassign

Units 4, 5, and 6 are highlighted in yellow. A 'Control Panel' button is visible at the bottom left of the screen.

The Units in Development/AMP screen facilitates a broader view of all units in the Development/AMP and helps in finding units that may have been overlooked earlier in the Unit Set creation process.

Note: Unassigned units are highlighted in yellow.

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Assign units to your Unit Set by selecting the desired Unit Set from the **Set** drop-down menu

A screenshot of a dropdown menu titled "Set". It contains four identical entries: "Baseline Unit Set -- Baseline Bldg Set -- Site 1". Below the list are three yellow highlighted rows, each with a downward arrow on the right side.

Once you have finished assigning available Units to Unit Sets, select the **Control Panel** button.

Select your newly-created Unit Set from the Building Sets column and click the **Edit Unit Set** button.

The screenshot shows the GPNA tool interface with four columns: Development/AMPs, Sites, Building Sets, and Unit Sets. Each column has a dropdown menu and a set of buttons below it. The 'New Building Set' is selected in the Building Sets column, and the 'Edit Unit Set' button is highlighted in the Unit Sets column.

Development/AMPs	Sites	Building Sets	Unit Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set	New Unit Set
Edit Development/AMP	Add Site	Add Building Set	Add Unit Set
Add Development/AMP	Edit Site	Edit Building Set	Edit Unit Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets	Assign Units to Sets
Edit Development Units		Inspect Building Sets	Inspect Unit Set

Note: You must first select a unit set from the Unit Sets column to enable the Edit Unit Set button

The Edit Unit Set screen appears

Development/AMP: Dev12345

Site: Site 1

Building Set: New Building Set

Unit Set Name: New Unit Set

Units In Set: 0

Bedrooms: 1

Full Baths: 0

Half Baths: 0

Average Ceiling Height: 0 LF

Floor Area: 0 SF

Use Master Inspection:

Available Units:

Units in this Set:

Press and hold CTRL to select multiple units.

Cancel Delete Save & Close

The following fields are automatically populated based on previous selections:

- Units In Set
- Units in this Set

Once you have finished editing this unit set, click the **Save & Close** button to return to the Control Panel.

Add a Common Area Set

A Common Area Set is a collection of common areas within a building which share characteristics such as gross interior perimeter wall length, average ceiling height, and gross floor area. The Common Area Set page is used to review and edit pre-assessment data for a set of common areas within a building.

To add a Common Area Set to a Building Set:

- 1) Start in the Control Panel,
- 2) Select the Development/AMP from the Development/AMPs column,
- 3) Select the Site from the Sites column,
- 4) Select the Building Set from the Building Sets column

Click the **Add Common Area Set** button under the Common Area Sets column

The screenshot displays a control panel with five columns: Development/AMPs, Sites, Building Sets, Unit Sets, and Common Area Sets. Each column has a list of items and a set of action buttons below it. The 'Add Common Area Set' button in the 'Common Area Sets' column is highlighted in blue.

Development/AMPs	Sites	Building Sets	Unit Sets	Common Area Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set	New Unit Set	
Edit Development/AMP	Add Site	Add Building Set	Add Unit Set	Add Common Area Set
Add Development/AMP	Edit Site	Edit Building Set	Edit Unit Set	Edit Common Area Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets	Assign Units to Sets	Inspect Common Area Set
Edit Development Units		Inspect Building Sets	Inspect Unit Set	

Note: It is not necessary to first select a Unit or Common Area Set to enable the **Add Common Area Set** button

The New Common Area Set screen appears.

Common Area Set Name - enter a name for this Common Area set

Common Areas In Set – total number of common areas in a building set which share the same characteristics such as gross interior perimeter wall length, average ceiling height and gross floor area.

In the Take-off Data portion of the New Common Area Set screen, enter the pre-assessment take-off measurements as appropriate.

When you are finished, click the **Save & Close** button. The new Common Area Set appears in the Common Area Sets column of the Control Panel.

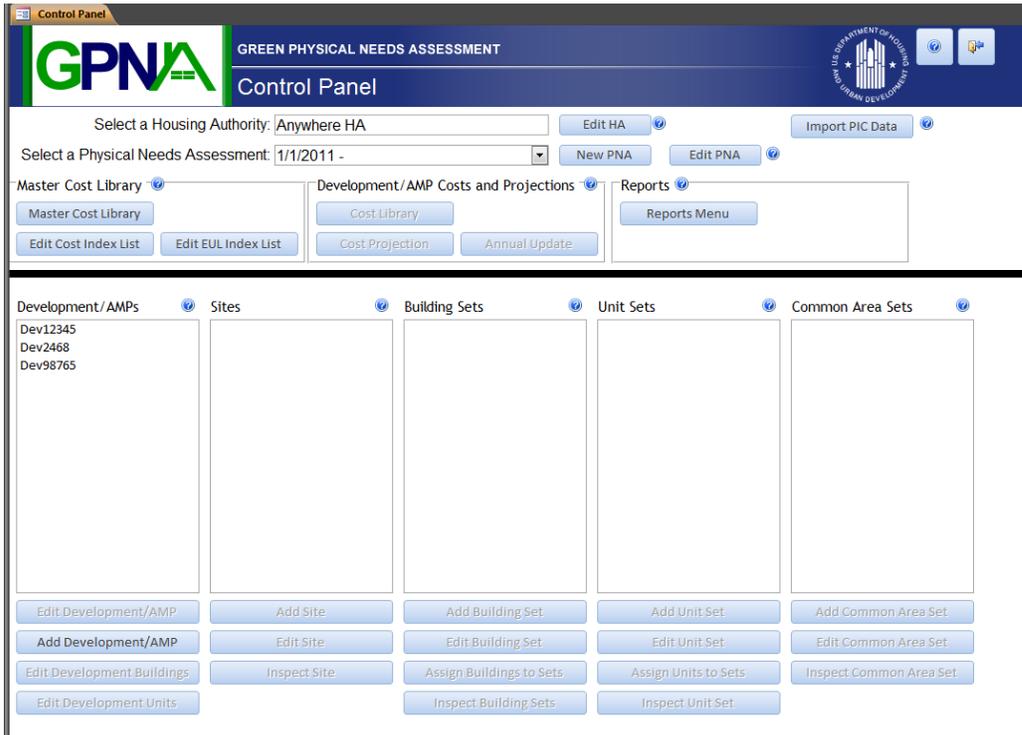
Development/AMPs	Sites	Building Sets	Unit Sets	Common Area Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set	New Unit Set	New Common Area Set 1
Edit Development/AMP	Add Site	Add Building Set	Add Unit Set	Add Common Area Set
Add Development/AMP	Edit Site	Edit Building Set	Edit Unit Set	Edit Common Area Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets	Assign Units to Sets	Inspect Common Area Set
Edit Development Units		Inspect Building Sets	Inspect Unit Set	

Review and Edit Measurements

Edit Development/AMPs

To edit a Development/AMP:

- 1) Start in the Control Panel,



- 2) Select a Development/AMP from the Development/AMPs column
- 3) Click the **Edit Development/AMP** button below the Development/AMPs column



The Development/AMP screen appears.

GPNA GREEN PHYSICAL NEEDS ASSESSMENT
Development/AMP: Dev12345

Development/AMP Data

Development/AMP Number: Dev12345
 Development/AMP Name: AnyWhere
 Address 1: 1234 some place
 Address 2:
 DOFA: 9/1/2011
 Occupancy Type: Family

Energy Audit Data

Date of Last Energy Audit:
 Energy Audit Performed By:

Building Count

Single Family Detached Buildings: 2
 Single Family Semi-detached Buildings: 2
 Row Townhouse Buildings: 0
 Walk Up MultiFamily Buildings: 0
 Elevator Structures: 0
 Maintenance Buildings: 0
 Community Buildings: 0
 Office Buildings: 0
 Storage Buildings: 0
 Other Buildings: 0

Unit Count

Bedroom Size: 0 1 2 3 4 5 6+
 # of ACC Units: 0 6 0 0 0 0 1
 # of Non-ACC Units: 0 0 0 0 0 0 0

Demolition Data

Demo/Dispo Approved? Demo Full Demo Partial
 Demo/Dispo Date:
 Bedroom Size: 0 1 2 3 4 5 6+
 # of Units: 0 0 0 0 0 0 0

From the Development/AMP

Building Assignment

Building	Type	Set
Building 1	Single Family Detached	Baseline Bldg Set
Building 2	Single Family Detached	Baseline Bldg Set
New Buildir	Single Family Semi-Detached	New Building Set
New Buildir	Single Family Semi-Detached	Unassigned

Unit Assignment

Unit	Bedrooms	Set
New Unit	10	Baseline Unit Set
Unit 1	1	Baseline Unit Set
Unit 2	1	Baseline Unit Set
Unit 3	1	Baseline Unit Set
Unit 4	1	Unassigned
Unit 5	1	Unassigned
Unit 6	1	Unassigned

Cancel Delete Save & Close

Data section of the screen, review and edit the following fields as necessary:

- **Development/AMP Number:** Enter the Development/AMP’s assigned number.
- **Development/AMP Name:** Enter a name for the new Development/AMP.
- **Address 1 and 2:** Enter the street address of the property.
- **DOFA:** Date of First Availability

Phase 1: Pre-Assessment – Preparing for the GPNA

Review and edit the Building Count section for each building type, as applicable.

Building Count

Single Family Detached Buildings:	2	<input checked="" type="checkbox"/>
Single Family Semi-detached Buildings:	2	<input checked="" type="checkbox"/>
Row Townhouse Buildings:	0	<input checked="" type="checkbox"/>
Walk Up MultiFamily Buildings:	0	<input checked="" type="checkbox"/>
Elevator Structures:	0	<input checked="" type="checkbox"/>
Maintenance Buildings:	0	<input checked="" type="checkbox"/>
Community Buildings:	0	<input checked="" type="checkbox"/>
Office Buildings:	0	<input checked="" type="checkbox"/>
Storage Buildings:	0	<input checked="" type="checkbox"/>
Other Buildings:	0	<input checked="" type="checkbox"/>

Review and edit the number of ACC and non-ACC units for each bedroom size, as applicable.

Unit Count

Bedroom Size:	0	1	2	3	4	5	6 +
# of ACC Units:	0	6	0	0	0	0	1
# of Non-ACC Units:	0	0	0	0	0	0	0

Review and edit the Demolition Data section of the screen

Demolition Data

Demo/Dispo Approved? Demo Full Demo Partial

Demo/Dispo Date:

Bedroom Size:	0	1	2	3	4	5	6 +
# of Units:	0	0	0	0	0	0	0

Review all Building and Unit Assignments in the Building Assignment and Unit Assignment tables at the bottom of the screen

Building Assignment

Building	Type	Set
Building 1	Single Family Detached	Baseline Bldg Set
Building 2	Single Family Detached	Baseline Bldg Set
New Buildin	Single Family Semi-Detached	New Building Set
New Buildin	Single Family Semi-Detached	Unassigned

Unit Assignment

Unit	Bedrooms	Set
New Unit	10	Baseline Unit Set
Unit 1	1	Baseline Unit Set
Unit 2	1	Baseline Unit Set
Unit 3	1	Baseline Unit Set
Unit 4	1	Unassigned
Unit 5	1	Unassigned
Unit 6	1	Unassigned

When you are finished, click the **Save & Close** button to save your change and return to the Control Panel screen.

Edit Development Buildings and Units

To add, edit, or delete development buildings and units to a development:

- 1) From the Control Panel, select the Development/AMP for which you want to edit a building or unit and then click either Edit Development Buildings or Edit Development Units.

The screenshot displays the GPNA Control Panel interface. At the top, there is a navigation bar with the GPNA logo and the text 'GREEN PHYSICAL NEEDS ASSESSMENT Control Panel'. Below this, there are several dropdown menus and buttons for selecting a Housing Authority (currently 'Anywhere HA') and a Physical Needs Assessment (currently '4/24/2013 -'). There are also buttons for 'Edit HA', 'Import PIC Data', 'New PNA', and 'Edit PNA'.

The main content area is divided into several sections:

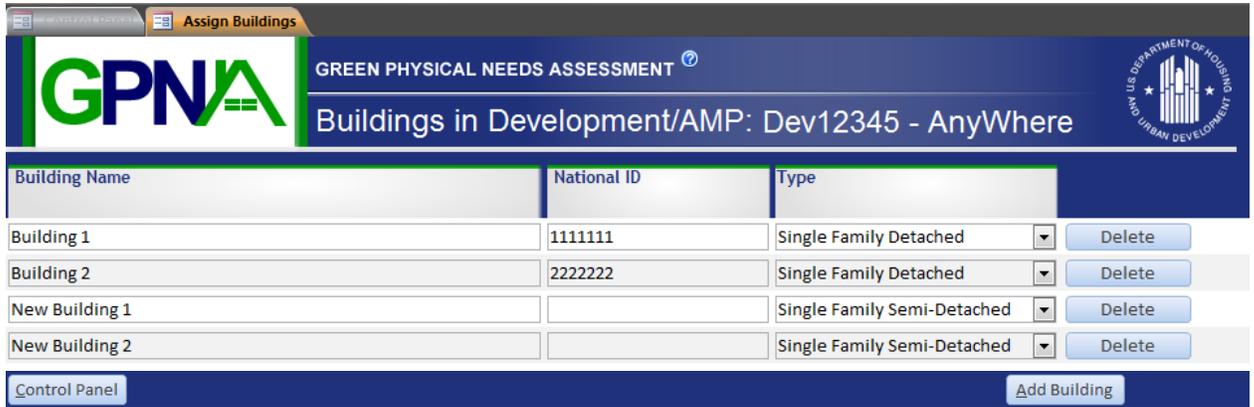
- Master Cost Library:** Includes buttons for 'Master Cost Library', 'Edit Cost Index List', and 'Edit EUL Index List'.
- Development/AMP Costs and Projections:** Includes buttons for 'Cost Library', 'Cost Projection', and 'Annual Update'.
- Reports:** Includes a 'Reports Menu' button.

Below these sections, there are five main categories, each with a list of items and a set of action buttons:

Development/AMPs	Sites	Building Sets	Unit Sets	Common Area Sets
<ul style="list-style-type: none"> Dev12345 Dev2468 Dev98765 	<ul style="list-style-type: none"> Site 1 site 2 			
<ul style="list-style-type: none"> Edit Development/AMP Add Development/AMP Edit Development Buildings Edit Development Units 	<ul style="list-style-type: none"> Add Site Edit Site Inspect Site 	<ul style="list-style-type: none"> Add Building Set Edit Building Set Assign Buildings to Sets Inspect Building Sets 	<ul style="list-style-type: none"> Add Unit Set Edit Unit Set Assign Units to Sets Inspect Unit Set 	<ul style="list-style-type: none"> Add Common Area Set Edit Common Area Set Inspect Common Area Set

- 2) When the **Buildings/Units in Development** screen appears, perform any of the following actions, as necessary:
 - Change the Name and ID for a building or unit by editing relevant fields.
 - Change the Type for a building or unit by clicking the appropriate drop-down and selecting from the list of choices.
 - Add a building or unit to the development by clicking the Add button at the bottom of the screen. A new row appears on the screen that you can edit as described above.
 - Remove a building or unit from the development by clicking the **Delete** button next to the row you want to remove.

Phase 1: Pre-Assessment – Preparing for the GPNA



The screenshot shows the 'Assign Buildings' section of the GPNA web application. The header includes the GPNA logo, the text 'GREEN PHYSICAL NEEDS ASSESSMENT', and the project title 'Buildings in Development/AMP: Dev12345 - AnyWhere'. A circular logo for the U.S. Department of Housing and Urban Development is also present. Below the header is a table with three columns: 'Building Name', 'National ID', and 'Type'. Each row in the table has a 'Delete' button to its right. At the bottom of the table area, there is a 'Control Panel' button on the left and an 'Add Building' button on the right.

Building Name	National ID	Type	
Building 1	1111111	Single Family Detached	Delete
Building 2	2222222	Single Family Detached	Delete
New Building 1		Single Family Semi-Detached	Delete
New Building 2		Single Family Semi-Detached	Delete

Control Panel Add Building

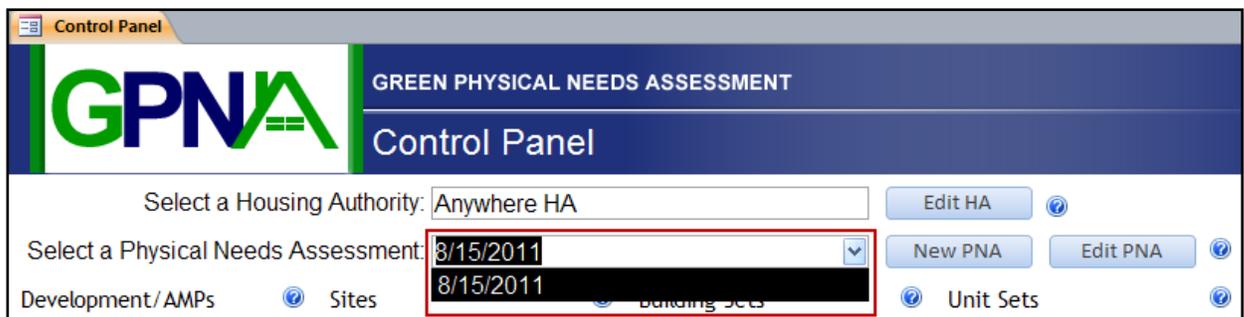
- 3) Click the **Control Panel** button to save your changes and return to the Control Panel.

Edit Sites

The **Edit Sites** page is used to review and edit pre-assessment data for a particular site within a Development/AMP. Site data includes name and street location for a Site, as well as a square-footage breakdown of the different areas within a Site, such as parking area, playground area, tennis, and basketball court areas.

To edit a Site within a Development/AMP:

- 1) Start in the Control Panel,
- 2) Select the Physical Needs Assessment that contains the Site you need to edit - click on the **Select a Physical Needs Assessment** drop-down menu and select the desired PNA from the list.



- 3) Select the appropriate Development/AMP from the Development/AMPs column
- 4) Select the Site from the Sites column and click the **Edit Site** button.



The Site screen appears.

The screenshot shows the 'Site' screen in the GPNA tool. The header includes the GPNA logo, 'GREEN PHYSICAL NEEDS ASSESSMENT', and the US Department of Housing and Urban Development logo. The page title is 'Site: Site 1'. The form is divided into two main sections: 'Site Data' and 'Take-off Data'. The 'Site Data' section contains fields for Development/AMP (HA12345), Site Name (Site 1), Address 1 (123 Anystreet), Address 2, City (Anywhere), State (TX), and Zip (12345). The 'Take-off Data' section contains fields for Gross Property Area (1245 SF), Gross Parking Area (754 SF), Gross Paved Pedestrian Area (967 SF), Gross Playground Area (124 SF), # of Tennis Courts (2), # of Basketball Courts (2), Avg. Tennis Area (453 SF), and Avg. Basketball Area (325 SF). At the bottom, there are buttons for 'Cancel', 'Delete', and 'Save & Close'.

Field	Value	Unit
Development/AMP	HA12345	
Site Name	Site 1	
Address 1	123 Anystreet	
Address 2		
City	Anywhere	
State	TX	
Zip	12345	
Gross Property Area	1245	SF
Gross Parking Area	754	SF
Gross Paved Pedestrian Area	967	SF
Gross Playground Area	124	SF
# of Tennis Courts	2	
# of Basketball Courts	2	
Avg. Tennis Area	453	SF
Avg. Basketball Area	325	SF

In the **Site Data** portion of the New Site screen, review and edit the Site Name, Address, City, State, and Zip information as necessary.

In the **Take-off Data** portion of the New Site screen, review and edit the pre-assessment take-off measurements as appropriate.

Click the **Save & Close** button to save your changes and return to the Control Panel.

Alternatively, you can click the **Delete** button to remove this site from the Development/AMP.

Edit Building Sets

The **Edit Building Sets** page is used to review and edit pre-assessment data for a particular set of buildings within a Site. A Building Set is a collection of buildings in a Site that share the same characteristics such as footprint, area, perimeter, height, and stories.

To review/edit a Building Set within a Site:

- 1) Start in the Control Panel,
- 2) Select the Physical Needs Assessment containing the desired Building Set from the **Select a Physical Needs Assessment** drop-down.
- 3) Select the desired Development/AMP from the Development/AMPs column
- 4) Select the Site from the Sites column.
- 5) Select the Building Set from the Building Sets column.

Click the **Edit Building Set** button under the Building Sets column.

Development / AMPs	Sites	Building Sets
<ul style="list-style-type: none"> Dev12345 Dev2468 Dev98765 	<ul style="list-style-type: none"> Site 1 site 2 	<ul style="list-style-type: none"> Baseline Bldg Set New Building Set Non-Baseline Bldg Set
<ul style="list-style-type: none"> Edit Development/AMP Add Development/AMP Edit Development Buildings Edit Development Units 	<ul style="list-style-type: none"> Add Site Edit Site Inspect Site 	<ul style="list-style-type: none"> Add Building Set Edit Building Set Assign Buildings to Sets Inspect Building Sets

The Building Set screen appears.

Review and edit the **Building Set Name** and **Structure Type** fields as needed.

Review and edit the square footage and length information for the buildings in this set in the **Footprint**, **Area**, **Perimeter**, **Average Height**, and **Stories** fields as needed.

Move buildings to and from the Available Buildings list and Buildings in this Set column by selecting the building(s) and clicking the left and right arrow buttons, depending on what you want to do. Available Buildings are buildings that do not belong to a set.

As you move buildings between columns, Bedroom Size/Units fields automatically adjust.

If you need to assign or remove buildings from this Building Set, complete the remaining steps in this procedure.

Click the **Save & Close** button to save your changes and return to the Control Panel screen.

Alternatively, you can click the **Delete** button to remove this Building Set from the Development/AMP.

Click the **Assign Buildings to Sets** button under the Building Sets column of the Control Panel.

The screenshot displays a control panel with three columns: Development/AMPs, Sites, and Building Sets. Each column has a list of items and a set of action buttons below it. The 'Assign Buildings to Sets' button is highlighted with a red border.

Development/AMPs	Sites	Building Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set
Edit Development/AMP	Add Site	Add Building Set
Add Development/AMP	Edit Site	Edit Building Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets
Edit Development Units		Inspect Building Sets

The Buildings in Development/AMP screen appears:

Building Name	Type	Set	
1	Row/Townhouse	New Building Set -- Site 1	Unassign
10	Single Family Detached	Building Set 1 -- Site 1	Unassign
11	Single Family Detached	Building Set 1 -- Site 1	Unassign
12	Single Family Detached	Building Set 1 -- Site 1	Unassign
13	Walk-Up/Multi-family	New Building Set -- Site 1	Unassign
14	Single Family Detached	Building Set 1 -- Site 1	Unassign
15	Single Family Detached	Building Set 1 -- Site 1	Unassign
16	Walk-Up/Multi-family	New Building Set -- Site 1	Unassign
17	Single Family Semi-Detached	Building Set 2 -- Site 1	Unassign
18	Walk-Up/Multi-family		Unassign
19	Single Family Detached	Building Set 1 -- Site 1	Unassign
2	Row/Townhouse		Unassign
20	Walk-Up/Multi-family		Unassign
21	Single Family Detached	Building Set 1 -- Site 1	Unassign
22	Single Family Semi-Detached	Building Set 2 -- Site 1	Unassign
23	Single Family Detached	Building Set 1 -- Site 1	Unassign
24	Single Family Detached	Building Set 1 -- Site 1	Unassign
25	Single Family Semi-Detached	Building Set 2 -- Site 1	Unassign
26	Single Family Detached	Building Set 1 -- Site 1	Unassign
27	Single Family Detached	Building Set 1 -- Site 1	Unassign
28	Single Family Semi-Detached	Building Set 2 -- Site 1	Unassign
29	Single Family Detached	Building Set 1 -- Site 1	Unassign

From the Set column, assign buildings to your Building Set by clicking the **Set** drop-down for each building and selecting the Building Set name for which you want to add or remove a building.

Building Name	Type	Set	
1	Row/Townhouse	New Building Set -- Site 1	
10	Single Family Detached	Building Set 1 -- Site 1	
11	Single Family Detached	Building Set 1 -- Site 1	
12	Single Family Detached	Building Set 1 -- Site 1	
13	Walk-Up/Multi-family	New Building Set -- Site 1	
14	Single Family Detached	Building Set 1 -- Site 1	
15	Single Family Detached	Building Set 1 -- Site 1	
16	Walk-Up/Multi-family	New Building Set -- Site 1	
17	Single Family Semi-Detached	Building Set 2 -- Site 1	
18	Walk-Up/Multi-family	Building Set 1 -- Site 1	
19	Single Family Detached	Building Set 2 -- Site 1	
2	Row/Townhouse	New Building Set -- Site 1	

Phase 1: Pre-Assessment – Preparing for the GPNA

To remove a building from your set, click the **Unassign** button next to the relevant building row.

Building Name	Type	Set	
1	Row/Townhouse	New Building Set -- Site 1	<input type="button" value="Unassign"/>
10	Single Family Detached	Building Set 1 -- Site 1	<input type="button" value="Unassign"/>
11	Single Family Detached	Building Set 1 -- Site 1	<input type="button" value="Unassign"/>

Click the **Control Panel** button when you are finished to return to the Control Panel.

Edit Unit Sets

The Unit Set page is used to review and edit pre-assessment data for a particular set of units at a building. A Unit Set is a collection of common areas in a building that share the same characteristics such as the number of bedrooms, number of full and half baths, ceiling height, and floor area.

To review and edit a Unit Set within a Site:

- 1) Start in the Control Panel,
- 2) Select the Physical Needs Assessment containing the desired Unit Set from the **Select a Physical Needs Assessment** drop-down.
- 3) Select the appropriate Development/AMP,
- 4) Select the Site from Sites column,
- 5) Select the Building Set from the Building Sets column
- 6) Select the desired Unit Set from the Unit Sets column.
- 7) Click the **Edit Unit Set** button under the Unit Sets column.

Development/AMPs	Sites	Building Sets	Unit Sets
Dev12345	Site 1	Baseline Bldg Set	Baseline Unit Set
Dev2468	site 2	New Building Set	Non-Baseline Unit Set
Dev98765		Non-Baseline Bldg Set	
Edit Development/AMP	Add Site	Add Building Set	Add Unit Set
Add Development/AMP	Edit Site	Edit Building Set	Edit Unit Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets	Assign Units to Sets
Edit Development Units		Building Set Baseline Insp.	Inspect Unit Set
		Building Set Needs Insp.	

The Unit Set screen appears:

Review and edit the Unit Set Name, Bedrooms, Full Baths, Half Baths, Average Ceiling Height, and Floor Area fields as needed.

Move Units to and from the **Available Units** and **Units In Set** columns by selecting the building(s) and clicking the left and right arrow buttons, depending on what you want to do.

As you move Units between the columns, the **Units In Set** field automatically updates.

If you need to assign or remove units from Unit Set, complete the remaining steps in this procedure.

Click the **Save & Close** button to save your changes and return to the Control Panel screen.

Alternatively, you can click the **Delete** button to remove this Unit Set from the Development/AMP.

Phase 1: Pre-Assessment – Preparing for the GPNA

Click the **Assign Units to Sets** button under the Unit Sets column of the Control Panel.

The screenshot shows a control panel with four main columns, each with a list of items and a set of buttons below. The 'Assign Units to Sets' button in the Unit Sets column is highlighted with a red border.

Development/AMPs	Sites	Building Sets	Unit Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set	Baseline Unit Set Non-Baseline Unit Set
Edit Development/AMP Add Development/AMP Edit Development Buildings Edit Development Units	Add Site Edit Site Inspect Site	Add Building Set Edit Building Set Assign Buildings to Sets Building Set Baseline Insp. Building Set Needs Insp.	Add Unit Set Edit Unit Set Assign Units to Sets Inspect Unit Set

The Units in Development/AMP screen appears:

The screenshot shows the 'Units in Development/AMP: Dev 1' screen. The table below lists the units, their bedroom counts, and the sets they are assigned to. Each row has an 'Unassign' button on the right.

Unit Name	Bedrooms	Set	
101-19 - 101 S. 19TH	3	New Unit Set -- Building Set 1 -- Site 1	Unassign
1105-E - 1105 ANYSTREET	3	New Unit Set -- Building Set 1 -- Site 1	Unassign
1608-B - 1608 ANYSTREET	3	New Unit Set -- Building Set 1 -- Site 1	Unassign
1910-K - 1910 ANYSTREET	3		Unassign
200-3 - 200 N. 3RD ST	0		Unassign
201-4 - 201 N. 4TH	0	New Unit Set -- Building Set 1 -- Site 1	Unassign
202-3 - 202 N. 3RD ST	1		Unassign
203-4 - 203 N. 4TH ST	1	New Unit Set -- Building Set 1 -- Site 1	Unassign
204-3 - 204 N. 3RD ST	2		Unassign
205-4 - 205 N. 4TH	1		Unassign
206-3 - 206 N. 3RD ST	2		Unassign
208-3 - 208 N. 3RD	0		Unassign
209-4 - 209 N. 4TH ST	1		Unassign
2101-K - 2101 ANYSTREET	3		Unassign
2105-K - 2105 ANYSTREET	3		Unassign
2107-K - 2107 ANYSTREET	3		Unassign
211-4 - 211 N 4TH ST	1		Unassign
213-4 - 213 N. 4TH ST	0		Unassign
300-A - 300 ANYSTREET	1		Unassign
301-H - 301 ANYSTREET	0		Unassign
302-A - 302 ANYSTREET	1		Unassign
303-H - 303 ANYSTREET	1		Unassign

Phase 1: Pre-Assessment – Preparing for the GPNA

From the Set column, assign units to your Unit Set by clicking the **Set** drop-down for each Unit and selecting the Unit Set name for which you want to add a Unit.

Unit Name	Bedrooms	Set	
101-19 - 101 S. 19TH		3 New Unit Set -- Building Set 1 -- Site 1	Unassign
1105-E - 1105 ANYSTREET		3 New Unit Set -- Building Set 1 -- Site 1	Unassign
1608-B - 1608 ANYSTREET		3 New Unit Set -- Building Set 1 -- Site 1	Unassign
1910-K - 1910 ANYSTREET		3	Unassign
200-3 - 200 N. 3RD ST		0 New Unit Set -- Building Set 1 -- Site 1 Unit Set 1 -- Building Set 1 -- Site 1	Unassign
201-4 - 201 N. 4TH		0 Unit Set 2 -- Building Set 1 -- Site 1	Unassign
202-3 - 202 N. 3RD ST		1 Unit Set 1 -- Building Set 2 -- Site 1	Unassign

To remove a unit from your Unit Set, click the **Unassign** button next to the relevant Unit row.

Unit Name	Bedrooms	Set	
101-19 - 101 S. 19TH		3 New Unit Set -- Building Set 1 -- Site 1	Unassign
1105-E - 1105 ANYSTREET		3 New Unit Set -- Building Set 1 -- Site 1	Unassign
1608-B - 1608 ANYSTREET		3 New Unit Set -- Building Set 1 -- Site 1	Unassign

Click the **Control Panel** button when you are finished to return to the Control Panel.

Edit Common Area Sets

The Common Area Set page is used to review and edit pre-assessment data for a set of common areas within a building. A Common Area Set is a collection of common areas within a building, which share similar characteristics such as gross interior perimeter wall length, average ceiling height, and gross floor area.

To review and edit a Common Area Set within a building:

- 1) Start in the Control Panel,
- 2) Select the Physical Needs Assessment containing the desired Common Area Set from the **Select a Physical Needs Assessment** drop-down.
- 3) Select the Development/AMP from the Development/AMPs column
- 4) Select the Site from the Sites column
- 5) Select the Building set from the Building Sets column
- 6) Select the Common Area Set from the Common Area Sets column and click the **Edit Common Area Set** button.

Development/ AMPs	Sites	Building Sets	Unit Sets	Common Area Sets
Dev12345 Dev2468 Dev98765	Site 1 site 2	Baseline Bldg Set New Building Set Non-Baseline Bldg Set	Baseline Unit Set Non-Baseline Unit Set	Meeting Area
Edit Development/AMP	Add Site	Add Building Set	Add Unit Set	Add Common Area Set
Add Development/AMP	Edit Site	Edit Building Set	Edit Unit Set	Edit Common Area Set
Edit Development Buildings	Inspect Site	Assign Buildings to Sets	Assign Units to Sets	Inspect Common Area Set
Edit Development Units		Building Set Master Insp.	Inspect Unit Set	
		Building Set Needs Insp.		

Note: It is not necessary to first select a Unit Set to enable the Edit Common Area Sets button.

The Common Area Set screen appears:

The screenshot shows the 'Common Area Set' window with the following data:

Section	Field	Value	Unit
Common Area Data	Development/AMP	HA12345	
	Site	Site 1	
	Building Set	Building Set 1	
	Common Area Set Name	Common Area 1	
	Common Areas In Set	5	
Take-off Data	Gross Interior Perimeter Wall Length	1234	LF
	Average Ceiling Height	8	LF
	Gross Floor Area	12345	SF

Review and edit the information in the **Common Area Data** and **Take-off Data** sections of the screen as necessary.

When you are finished, click the **Save & Close** button to return to the Control Panel. Alternatively, you can click the **Delete** button to remove this site from the Development/AMP.

Resident Notification

At this point all pre-assessment data should be entered into the tool and you are ready to move to the final step in this phase. Dates and times for the onsite assessment are confirmed, residents should be notified of their units' inclusion in the GPNA assessment, in compliance with PHA policies. In the event that selected units are not accessible during the scheduled onsite survey, additional units may be recommended for consideration and inclusion.

PHAs may consider seeking resident participation throughout the GPNA process. Resident participation could be achieved through a simple questionnaire regarding unit components. Resident participation is not a GPNA process requirement, but rather left to the discretion of the PHA.

Quick Steps

Phase 2 focuses on conducting the GPNA. The following provides an overview of the duties associated with conducting the GPNA.

- 1) Determine a Method of Data Gathering
- 2) Perform a Walk-Through
- 3) Print the GPNA Inspection
- 4) Evaluate Replacement/Refurbishment Components
- 5) Identify and Confirm Component Types including Sustainability, Accessibility, Marketability/Livability Components
- 6) Identify and Component Quantities

Please keep in mind that help is only a click away! Look for this icon  to access brief explanations and instructions about various GPNA tool functions.

PHASE 2: Assessment – Conducting the GPNA

Determine a Method of Data Gathering

Inspection forms are based on the components entered into your PHA's cost and EUL library of components. If the take-offs and cost/EUL library is completed during the pre-assessment phase, the inspection forms will be customized during the assessment phase. If not, the GPNA tool will have a built-in set list of general building systems and components to populate the inspection forms. The collection forms may either be in an electronic hand-held device or in paper format.

The form itself captures whether the component is present or absent (AB), the take-off (measurement/quantity) Unit of Measurement, whether it should be a refurbishment or replacement of the component, and the Remaining Useful Life (RUL) of the component. In addition to a comments section allows you to take notes and/or add pictures. Within the GPNA tool, the data entry will look similar to the offline form to promote ease of use during data entry process.

Perform a Walk-Through

During the walk-through, you will observe all building/site building systems and components at the Development/AMP and record observations. Within the GPNA tool, each development will have a data collection form for site, building exterior, building systems, common areas, units, building mechanical equipment, and non-dwelling equipment.

The forms are standardized with a list of components applicable to the area of the site that is being assessed. The form elements include the following:

- Development data
- Building/site component line item to be observed
- Take-off (from pre-assessment or for recording measurements by the assessor)
- Unit of measure (SF = square feet, LF = linear feet, # = total unit count)
- Refurbishment and replacement
- Date of installation = year (age)
- Comment (brief word narrative to be used at your own discretion)

The GPNA tool is designed to facilitate systematic data recording of the physical condition of each component based upon the standard of that component.

Each PHA is responsible for meeting local building code standards and/or other state and federal requirements.

A walk-through involves the following steps:

- 1) Inspect the building exteriors and grounds
- 2) Inspect the building systems
- 3) Inspect the units
- 4) Inspect the common, community, and offices areas, grounds, fencing and parking areas

During the walk-through assessment, you can take photographs as appropriate in order to support the required replacement or refurbishment actions as determined by the PHA. These photos may be useful in justifying replacement or refurbishment actions later and can be attached to specific line items during the post-assessment phase from the Inspection screens, including the Site, Building Set, Unit, and Common Area Inspection screens.

Items Needed for the Assessment

To perform the on-site assessment, you should be equipped with items such as:

- Tape measures and measuring wheels
- Digital camera
- Ladder for access to roofs/attics
- Unit Entry Notification Forms in the event a pass key is used to gain entry
- Pass key or escort with pass key
- Flashlight
- Site map if not familiar with the development
- GPNA Inspection forms, either printed paper version or via electronic device

Print the GPNA Inspection

To print an inspection:

- 1) From the Control Panel, choose your PNA and then select the Development/AMP from the Development/AMPs column.
- 2) Continue by selecting the relevant Site, Building Set, Unit Set, and or Common Area Set until you locate the component that requires the inspection data.
- 3) Click the **Inspect** button underneath the selected component to open the Inspection window for that component.
- 4) Choose the inspection to print from the **Select Inspection** drop-down menu.

- 5) Click the **Perform Action** drop-down menu at the bottom of the screen, select **Print Form**, and click the **Go** button.

Line Item ID	Component
2230	Roofs
2240	Roofs
2250	Roofs
2260	Roofs
2261	Roofs

- 6) When the Print window appears, select the name of the printer and click the **OK** button.

Evaluate Replacement/Refurbishment Components

PHAs may be inclined to implement a replacement/refurbishment strategy for varying building systems and components. Due to budgetary constraints, a more practical approach may be to refurbish failing building systems in lieu of a total replacement.

A capital refurbishment is defined as a comprehensive repair activity of a building system or component that is beyond the normal scope of general maintenance, and extends the Estimated Useful Life (EUL) of the building system or component. Extension of the EUL of refurbished building systems or components must be at least 50% of the replacement's EUL.

Capital refurbishment strategy may only be accounted within the first five years of the GPNA's 20-year accrual. Any needs after Year 6 of the accrual are strictly projected as a replacement cost.

Identify and Confirm Component Types

After you complete the walk-through assessment, verify each element of the inspection form (collection form/electronic entry), complete the data collection for building systems and components, and review the documents/data to check for completeness, accuracy, and quality review checks.

Identify Sustainability Components

The sustainability needs component serves as a data receptacle of energy audit information within the GPNA. As such, the sustainability needs component data will be coordinated with the data from an energy audit that should be conducted in conjunction with the GPNA. All PHAs are required to perform an energy audit as per 24 CFR Part 965.302,¹ which states: "All PHAs shall complete an energy audit for each PHA-owned Development/AMP under management, not less than once every five years."

The green items identified for consideration by an energy audit, as well as, the green principles within the sustainability needs component serve as a base to develop the sustainability needs component. Existing cost/benefit formulas from an energy audit will be reviewed to help assess the most accurate way to determine cost effectiveness of green replacement items. The sustainability schedule will track only those incremental expenses related to installing green/energy efficient components replacing non-green components. It should be noted that this section within the GPNA is not an Energy Audit, and does not take the place of a PHA's energy audit requirement.

¹ For additional background information, see 24 CFR Subpart C—Energy Audits and Energy Conservation Measures.

The sustainability needs component will consist of a library of component items known to provide cost effectiveness, energy efficiency, and other environmental benefits. Where possible, this list will correspond with applicable line items within the building/site building systems and component list. “Other” sustainable components may be entered based upon the PHA’s energy audit.

Your Sustainability component should fall into the following strategic methods:

- These are standard components for which costs are known, such as appliances, lighting, and plumbing fixtures. Green appliances can be justified, and payback can be calculated using a simple payback calculation.
- These are customized components for which an energy audit and building professional may be required. The components include the building envelope (windows, doors, and insulation), HVAC equipment, and controls. An energy audit and a contractor’s expertise are required to cost appropriate components and calculate the energy savings. When making recommendations, the contractor must consider the maintenance costs and situational appropriateness of suggested green components, as well as energy savings. Resulting cost, payback, and useful life data are documented within the GPNA tool.
- These are components without a financial payback (e.g., cabinet materials, paints, and landscaping). In this case, recommended replacements may be practical and proven green options to consider, but they do not offer any financial payback or energy conservation.

Identify Accessibility Components

The accessibility needs component of the GPNA serves as a measurement tool that only tracks improvements necessary for adding accessibility functionality. Existing accessibility components are tracked in the replacement needs component.

The GPNA tool is not intended to be a compliance tool and will not document the number of accessible units for the purpose of compliance. The GPNA accounts for the costs to achieve accessibility in units and common areas.

The GPNA tool captures incremental accessible work and the associated cost under the appropriate building/site component during the course of conducting the GPNA. The GPNA tool has a data field that enables the GPNA provider to indicate if the additional work identified in GPNA and the associated cost is related to the provision of accessible units. The GPNA provider will not utilize the accessibility data field for work associated with individual components that are already accessible at the time of the GPNA. If a component is added for accessibility then it will be entered into the accessibility data field. After completion of the GPNA, the GPNA tool will calculate all work for which the accessibility data field was checked under the accessibility

component showing the individual work items, the cost of the individual work along, with the total cost associated with providing incremental accessibility.

Identify Marketability/Livability Components

Marketability/livability components are capital improvements that add new functionality that did not previously exist, or that promote occupancy by keeping and attracting new tenants. In some markets where rents are low and plenty of choices are available, marketability may make the difference between viable and non-viable properties. Capital improvements go beyond capital replacements in that they provide components with new functionality Not currently present.

A combination of factors, including: obsolete design, technological advances, maintenance issues, and lack of upgrades or modernization, contribute the Marketability and livability of properties.

PHAs should consider marketability /livability improvements as market-related capital expenses with the goal of increasing curb appeal, reducing vacancies, and modernizing systems with modest efforts to address obsolete designs. Additional items may be considered redevelopment, rather than marketability/livability improvements.

Identify and Confirm Component Quantities

At this point, all of your data should be recorded for the three most important data points for each component item present: quantity, condition, and age (as indicated by an actual or estimated date of installation).

PHASE 3: Post-Assessment – Completing the GPNA

Quick Steps

Phase 3 of the GPNA focuses on the completion of the GPNA and post-assessment. The following procedure presents an overview of the steps required to complete a GPNA:

- 1) Input data collected into the GPNA tool.
- 2) Build the Cost and EUL Libraries.
- 3) Conduct Quality Control procedures.
- 4) Prepare the GPNA report.
- 5) Submit the report to the HUD Central Database.

Please keep in mind that help is only a click away! Look for this icon  to access brief explanations and instructions about various GPNA tool functions.

Enter GPNA Data into GPNA Tool

You must record the data collected from the GPNA into the GPNA tool in order to calculate the cost projections for a Development/AMP.

You can enter the take-off data from the Site, Building Sets, Unit Sets, and Common Area Sets into the GPNA tool. If you have already input data into your Master Cost Library, it may be necessary to update the Cost Library again to add additional or new components found during the GPNA.

Add/Edit/Delete an Inspection

Each HA Development/AMP has five components available for assessment:

- Site
- Building Exterior
- Building Systems
- Units
- Common Areas

In the GPNA tool, each Development/AMP has a list of Sites and each site contains Building Sets, which contain Unit Sets and the Common Areas.

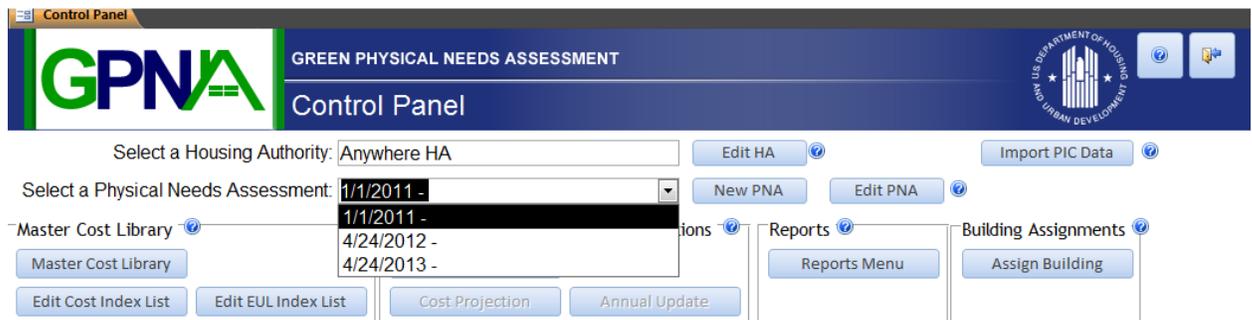
Note: Building Sets contain both the Building Exterior and Building Systems data.

Add a New Inspection

You can either enter a new inspection record or import a GPNA inspection Excel file.

To enter a new inspection record for your selected component:

- 1) From the Control Panel, select the Physical Needs Assessment that contains the relevant components by clicking the **Select a Physical Needs Assessment** drop-down and selecting a GPNA from the list.



- 2) Select the Development/AMP that you need to add GPNA data to from the Development/AMPs column of the Control Panel.
- 3) Continue by selecting the relevant Site, Building Set, Unit Set, and Common Area Set until you locate the component that requires the inspection data.
- 4) Click the **Inspect** button underneath the selected component to open the Inspection window for that component.
- 5) Click the **Add Inspection** button at the top of the Inspection screen.

Line Item ID	Component	Line Item	Description	Unit Takeoff	Unit of Measure
4011	Porch/Balcony	Porches/Balcony		100	SF
4012	Porch/Balcony	Steps/Patio, Porch		100	SF
4013	Porch/Balcony	Guard Railings		100	LF

The New Inspection window appears.

In the **Inspection Name** field, enter the name of the Building/Unit/Common Area being inspected. For Buildings and Units, select the name from the drop-down menu containing the names in that set.

Continue to fill out optional fields in this window as needed, adding inspectors names, followed by inspection addresses and description

Click the **Add & Close** button when you are finished.

The Inspection screen updates with a blank inspection page and a newly-created inspection is listed in the **Select an Inspection** section.

Phase 3: Post-Assessment – Completing the GPNA

Line Item ID	Component	Line Item	Description	Unit Takeoff	Unit of Measure	Absent	Installation Year	RUL	Immediate Replace %	Immediate Refurb %
4011	Porch/Balcony	Porches/Balcony		0	SF	<input checked="" type="checkbox"/>			0	0
4012	Porch/Balcony	Steps/Patio, Porch		0	SF	<input checked="" type="checkbox"/>			0	0
4013	Porch/Balcony	Guard Railings		0	LF	<input checked="" type="checkbox"/>			0	0
4110	Local HVAC	Evaporative Condenser ("Swamp Cooler")		0	SF	<input checked="" type="checkbox"/>			0	0
4111	Local HVAC	Condensing Unit/Heat Pump		0	SF	<input checked="" type="checkbox"/>			0	0
4120	Local HVAC	Fan Coil Unit		0	SF	<input checked="" type="checkbox"/>			0	0
4132	Local HVAC	Thermostat, Programmable		0	Each	<input checked="" type="checkbox"/>			0	0
4140	Local HVAC	Furnaces		0	SF	<input checked="" type="checkbox"/>			0	0
4147	Local HVAC	Grilles, HVAC Supply and Return		0	SF	<input checked="" type="checkbox"/>			0	0

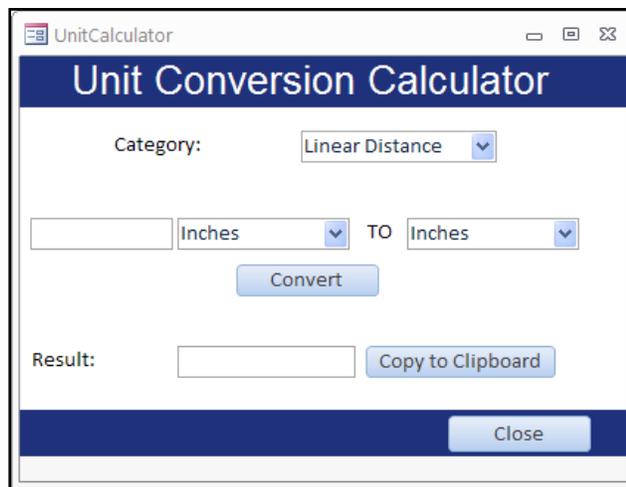
Note: For Building Inspections, you also need to select if you are entering inspection data for the Exterior or Systems of the building. To do this, select either **Exterior** or **Systems** from the **Select a View** drop-down menu that appears on the Building Inspection screen

6) Enter data into the line items and fields in the Inspection screen as needed.

Line Item ID	Component	Line Item	Description	Building Takeoff	Unit of Measure	Absent
0001	Foundations	0001		0	LF	<input checked="" type="checkbox"/>
2110	Foundations	Crawl Space/4 Ft Foundation		0	SF	<input checked="" type="checkbox"/>
2120	Foundations	Basement/8 Ft Foundation		0	SF	<input checked="" type="checkbox"/>
2130	Foundations	Slab On Grade - On Grade		76	SF	<input type="checkbox"/>
2131	Foundations	Slab On Grade - Below Grade		7	SF	<input type="checkbox"/>
2140	Structure	Floor Structural System		5	SF	<input type="checkbox"/>
2150	Structure	Roof Structural System		0	SF	<input checked="" type="checkbox"/>
2160	Structure	Wall/Beam/Column Structural System		0	SF	<input checked="" type="checkbox"/>
2220	Roofs	Asphalt Shingles		0	SF	<input checked="" type="checkbox"/>
2221	Roofs	Tile Or Wood Shake Shingles		0	SF	<input checked="" type="checkbox"/>
2222	Roofs	Metal Roof		0	SF	<input checked="" type="checkbox"/>
2223	Roofs	Built-Up/Membrane		0	SF	<input checked="" type="checkbox"/>
2230	Roofs	Add Line Item		0	SF	<input checked="" type="checkbox"/>
2240	Roofs	Add Takeoffs from Pre-Assessment		0	SF	<input checked="" type="checkbox"/>
2250	Roofs	Print Form		0	SF	<input checked="" type="checkbox"/>
2250	Roofs	Export Inspection to Excel		0	Each	<input checked="" type="checkbox"/>
2260	Roofs	Import from Excel		0	LF	<input checked="" type="checkbox"/>
2261	Roofs	Open Blank Inspection Form in Excel		0	LF	<input checked="" type="checkbox"/>
2261	Roofs	Open Blank Inspection Form in PDF		0	LF	<input checked="" type="checkbox"/>

To more easily enter data, remember the following:

- Click on the **Info** button at the end of each row to open up a Line Item Definition window for a specific line item. This window displays detailed information on the line item and the fields not included on the inspection form.
- Click on the **Perform Action** drop-down at the bottom of the Inspection screen to display a menu item of additional actions you can perform for the Inspection form such as adding and copying line items, opening forms in Excel and PDF formats, and printing forms.
- Click on the **Unit Conversion Calculator** button in the top-right corner of the screen to launch a calculator that will help you convert basic distance, area, energy usage, and liquid volume measurements.



The GPNA tool automatically disallows some replacement and/or refurbishment options for some line items based on applicability or established effectiveness.

Enter Data for Building Set Master Inspection and Set Needs Inspections

In addition to performing basic inspections, you can also add data for set baseline and needs inspections.

To enter set baseline and set needs inspection data for building and unit sets:

- 1) Select the relevant baseline building or unit set from the Control Panel.
- 2) Click on the relevant **Set Master Insp.** or **Set Needs Insp.** button.

The screenshot displays the GPNA Control Panel interface. At the top, the GPNA logo and 'GREEN PHYSICAL NEEDS ASSESSMENT' are visible, along with the 'Control Panel' title and the Illinois Department of Housing and Urban Development logo. Below the header, there are several navigation buttons: 'Master Cost Library', 'Edit Cost Index List', 'Edit EUL Index List', 'Cost Library', 'Cost Projection', 'Annual Update', 'Reports Menu', and 'Assign Building'. The main content area is divided into five columns, each with a dropdown menu and a list of items:

- Development/AMPs:** Dev12345, Dev2468, Dev98765
- Sites:** Site 1, site 2
- Building Sets:** Baseline Bldg Set, Non-Baseline Bldg Set
- Unit Sets:** Baseline Unit Set, Non-Baseline Unit Set
- Common Area Sets:** Meeting Area

Below each list are several action buttons: 'Edit Development/AMP', 'Add Development/AMP', 'Edit Development Buildings', 'Edit Development Units', 'Add Site', 'Edit Site', 'Inspect Site', 'Add Building Set', 'Edit Building Set', 'Assign Buildings to Sets', 'Building Set Master Insp.', 'Building Set Needs Insp.', 'Add Unit Set', 'Edit Unit Set', 'Assign Units to Sets', 'Inspect Unit Set', and 'Add Common Area Set', 'Edit Common Area Set', 'Inspect Common Area Set'. A 'Go to Dashboard' button is located at the bottom left.

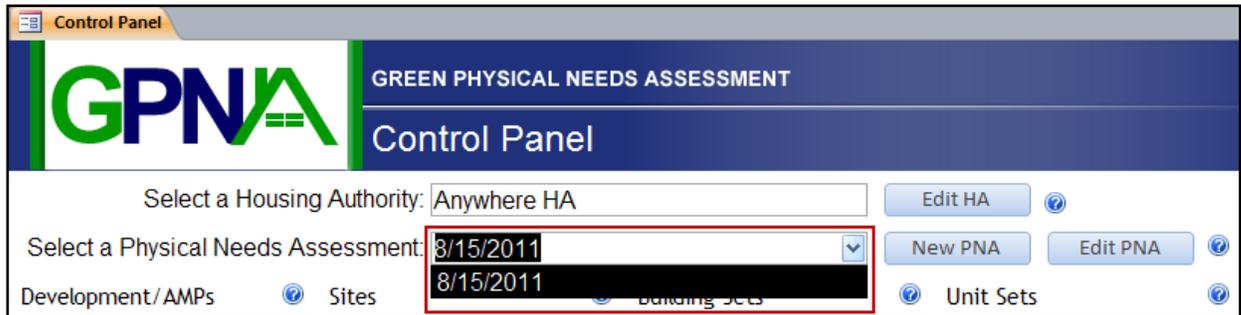
- 3) When the Building Set Master Inspection screen appears, update the screen as necessary. The functionality is identical to the standard inspection screens outlined in the previous procedure.

Export an Inspection to an Excel File

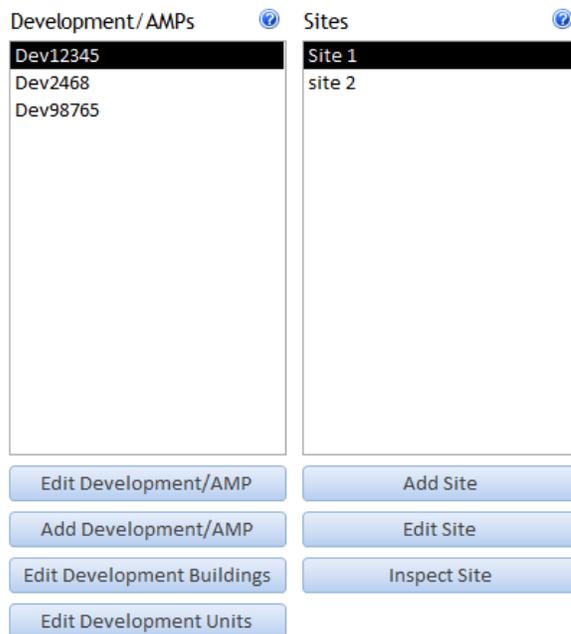
The advantage of exporting the inspection form to an Excel file will allow multiple users to perform data entry and then simply import data back into the tool.

To export an inspection to an Excel file:

- 1) Start in the Control Panel, select the Physical Needs Assessment containing the desired inspection from the **Select a Physical Needs Assessment** drop-down



- 2) Select the desired Development/AMP from the Development/AMPs column
- 3) Select the Site from the Site column and select Inspect Site



The Site Inspection screen appears –

Line Item ID	Component	Line Item	Description	Site Takeoff	Unit of Measure	Absent
1010	Play Areas and Equipment	Chain Link		0	LF	<input checked="" type="checkbox"/>
1010	Fencing and Gates	Chain Link		26	LF	<input type="checkbox"/>
1011	Fencing and Gates	Wrought Iron		0	LF	<input checked="" type="checkbox"/>
1012	Fencing and Gates	Wood		0	LF	<input checked="" type="checkbox"/>
1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade		0	SF	<input checked="" type="checkbox"/>
1110	Grounds	Earthwork		0	SF	<input checked="" type="checkbox"/>
1120	Grounds	Landscaping		0	SF	<input checked="" type="checkbox"/>
1130	Grounds	Trees, Trimming		0	Each	<input checked="" type="checkbox"/>
1140	Grounds	Land and Grounds: Irrigation		0	SF	<input checked="" type="checkbox"/>

Control Panel Perform Action: Add Line Item Go

- Click the Perform Action drop-down menu, select **Export Inspection to Excel** and click the **Go** button.



Note: Each Inspection screen contains a Perform Action drop-down menu, whereby the user may export any inspection to an excel file, including Site, Building, Unit, and Common Area Set inspections screen

- After Excel launches and displays your exported inspection, save the Excel file to a location on your PC.

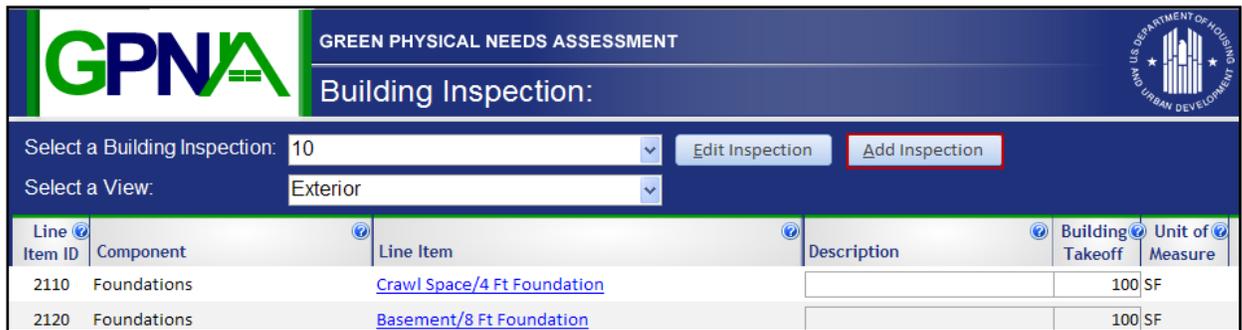
Import a New Inspection in Excel Format

You can import a new inspection in Excel format as long as the inspection is already in the correct GPNA Excel format.

Note: To see the correct GPNA Excel format, select **Open Blank Inspection Form in Excel** from the Perform Action drop-down on the Inspection screen and click **Go**.

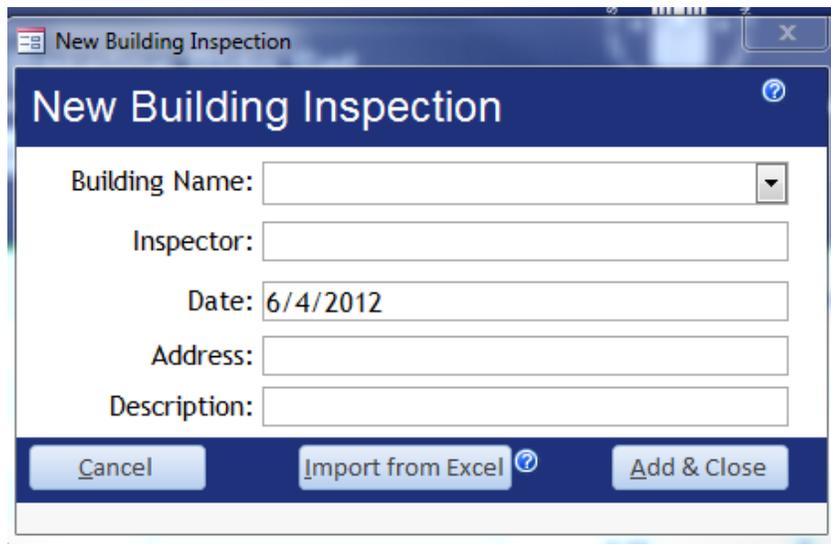
To import a new inspection in Excel file format:

- 1) Click on the **Add Inspection** button at the top of the Inspection screen.



Line Item ID	Component	Line Item	Description	Building Takeoff	Unit of Measure
2110	Foundations	Crawl Space/4 Ft Foundation		100	SF
2120	Foundations	Basement/8 Ft Foundation		100	SF

The New Inspection window appears.



- 2) Click on the **Import from Excel** button.
- 3) When the Browser window appears, navigate to your Excel file located on your PC, highlight it, and click the **OK** button.
- 4) Click the **Save** button when the Confirm Load pop-up window appears.

Note: If the file is not properly saved, the system alerts the user by displaying a red message under the Status. Verify inspection form matches GPNA tool selected inspection.

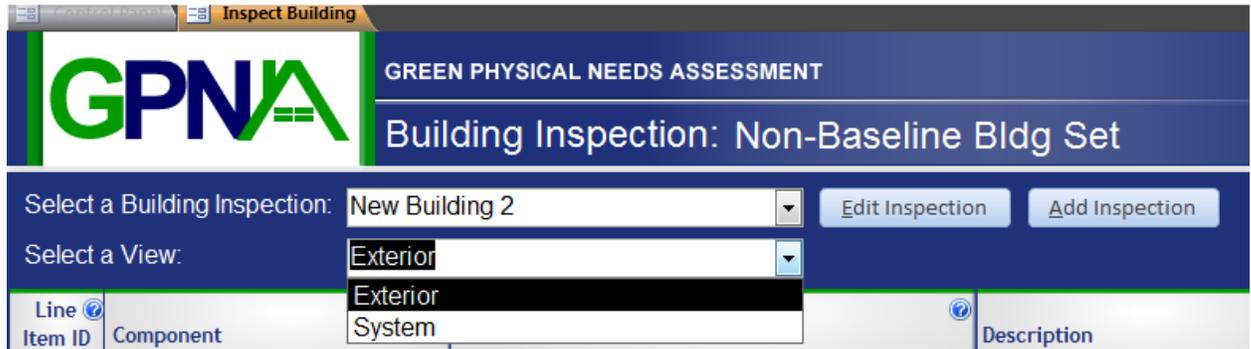
Edit a Current Inspection

To edit a current inspection:

- 1) From the Control Panel, select the Physical Needs Assessment that contains the relevant components by clicking the **Select a Physical Needs Assessment** drop-down and selecting the appropriate GPNA from the list.
- 2) Select the Development/AMP that you need to add GPNA data to from the Development/AMPs column of the Control Panel.
- 3) Continue by selecting the relevant Site, Building Set, Unit Set, or Common Area Set depending on the component that requires the inspection data.
- 4) Click the **Inspect** button underneath the selected component to open the Inspection window for that component.

The screenshot displays the GPNA Control Panel interface. At the top, the header includes the GPNA logo, the text 'GREEN PHYSICAL NEEDS ASSESSMENT', and the 'Control Panel' title. On the right side of the header is the U.S. Department of Housing and Urban Development logo. Below the header, there are several input fields and buttons: 'Select a Housing Authority: Anywhere HA' with an 'Edit HA' button, 'Select a Physical Needs Assessment: 4/24/2013 -' with a 'New PNA' and 'Edit PNA' button, and an 'Import PIC Data' button. The main content area is divided into three sections: 'Master Cost Library' (with buttons for 'Master Cost Library', 'Edit Cost Index List', and 'Edit EUL Index List'), 'Development/AMP Costs and Projections' (with buttons for 'Cost Library', 'Cost Projection', and 'Annual Update'), and 'Reports' (with a 'Reports Menu' button). Below these sections is a grid of five columns: 'Development/AMPs', 'Sites', 'Building Sets', 'Unit Sets', and 'Common Area Sets'. Each column contains a list of items (e.g., Dev12345, Dev2468, Dev98765) and a set of buttons for actions like 'Add', 'Edit', 'Assign', and 'Inspect'. At the bottom left, there is a 'Go to Dashboard' button.

- From the Inspection screen, choose an inspection to edit from the **Select an Inspection** drop-down.



Note: For Building Inspections, inspection data is entered for both Building Exterior and Building System components. To edit inspection data for either Building Exterior or Building System components, select either **Exterior** or **Systems** from the Select a View drop-down that appears on the Building Inspection screen.

- Click the **Edit Inspection** button at the top of the screen.
- When the Edit Inspection window appears, review and edit the fields as needed.

Line Item ID	Component	Line Item	Description	Building Takeoff	Unit of Measure	Absent	Installation Year	RUL	Immediate Replace %	Immediate Returb %	Info
2110	Foundations	Crawl Space/4 Ft Foundation		100	SF	<input type="checkbox"/>		5	0	10	Info
2120	Foundations	Basement/8 Ft Foundation		100	SF	<input type="checkbox"/>		4	0	10	Info
2130	Foundations	Slab On Grade - On Grade		100	SF	<input type="checkbox"/>		3	10	0	Info
2131	Foundations	Slab On Grade - Below Grade		100	SF	<input type="checkbox"/>		2	0	0	Info
2140	Structure	Floor Structural System		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2150	Structure	Roof Structural System		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2160	Structure	Wall/Beam/Column Structural System		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2220	Roofs	Asphalt Shingles		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2221	Roofs	Tile Or Wood Shake Shingles		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2222	Roofs	Metal Roof		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2223	Roofs	Built-Up/Membrane		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2230	Roofs	Parapet Wall		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2240	Roofs	Add Line Item		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2250	Roofs	Add Takeoffs from Pre-Assessment		0	Each	<input checked="" type="checkbox"/>			0	0	Info
2260	Roofs	Export Inspection to Excel		0	SF	<input checked="" type="checkbox"/>			0	0	Info
2261	Roofs	Open Blank Inspection Form in Excel		0	LF	<input checked="" type="checkbox"/>			0	0	Info

Phase 3: Post-Assessment – Completing the GPNA

To attach a photo to a Line-item,

- 1) Start in the Control Panel,
- 2) Select a Development/AMP from the Development/AMPs column,
- 3) Select a Site from the Sites column

Development/AMPs	Sites
Dev12345	Site 1
Dev2468	site 2
Dev98765	

Edit Development/AMP	Add Site
Add Development/AMP	Edit Site
Edit Development Buildings	Inspect Site
Edit Development Units	

- 4) Select Inspect Site, the Site Inspection screen appears –

Line Item ID	Component	Line Item	Description	Site Takeoff	Unit of Measure	Absent
1010	Play Areas and Equipment	Chain Link		0	LF	<input checked="" type="checkbox"/>
1010	Fencing and Gates	Chain Link		26	LF	<input type="checkbox"/>
1011	Fencing and Gates	Wrought Iron		0	LF	<input checked="" type="checkbox"/>
1012	Fencing and Gates	Wood		0	LF	<input checked="" type="checkbox"/>
1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade			SF	<input checked="" type="checkbox"/>
1110	Grounds	Earthwork		0	SF	<input checked="" type="checkbox"/>
1120	Grounds	Landscaping		0	SF	<input checked="" type="checkbox"/>
1130	Grounds	Trees, Trimming		0	Each	<input checked="" type="checkbox"/>
1140	Grounds	Land and Grounds: Irrigation		0	SF	<input checked="" type="checkbox"/>
1150	Grounds	Desert Landscaping		0	SF	<input checked="" type="checkbox"/>

- 5) Select on the desired blue highlighted Line-Item from the Line Item column, the Line Item Detail screen appears –

Line Item Detail

Line Item ID: 1010

Component: Fencing and Gates

Line Item: Chain Link

Description:

Takeoff: 26

Unit of Measure: LF

Absent:

Installation Year:

RUL: 5

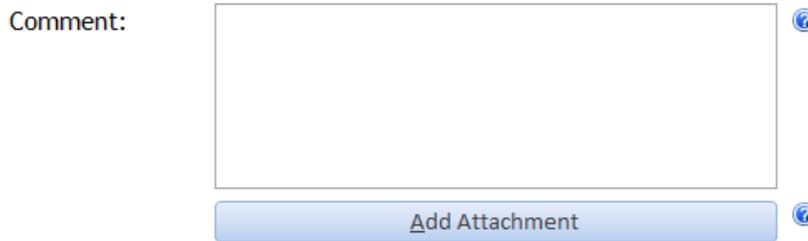
Replace %: 20

Refurbish %: 30

Comment:

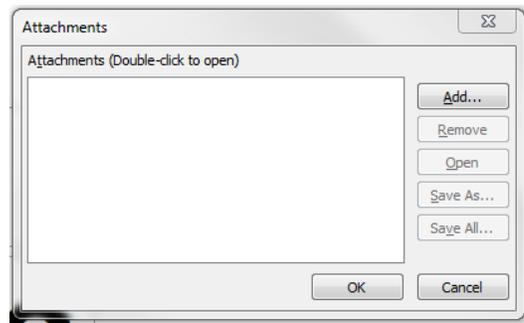
[Add Attachment](#)

- 6) Select on the Attachments button, located below the comments box

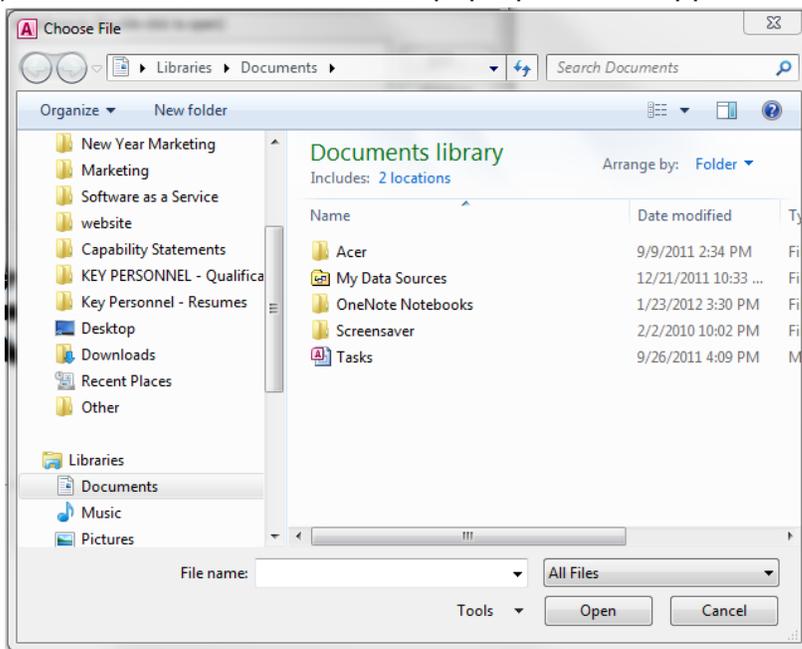


- 7) Right-click inside the Attachment box, Select Manage Attachments

- 8) The Attachments window appears –



- 9) Select Add, the Choose File pop-up window appears –



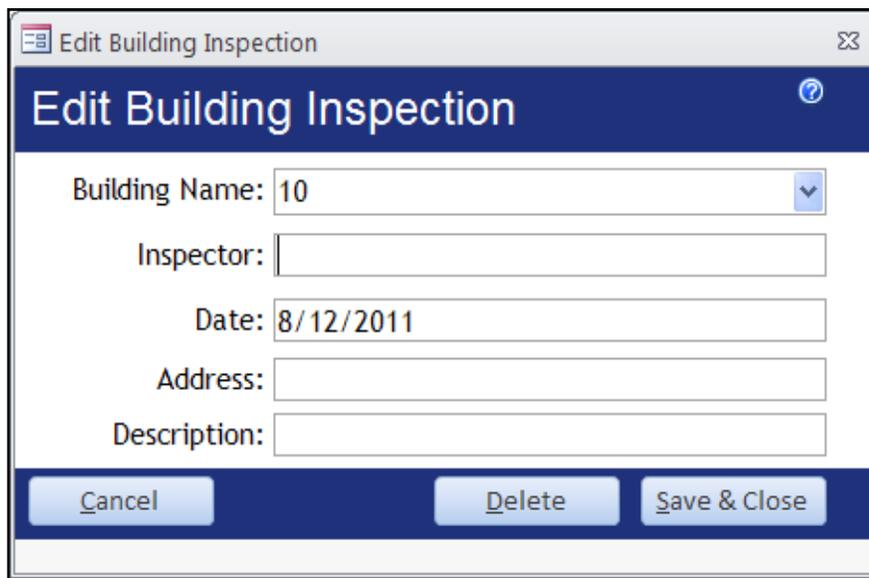
- 10) Browse your local computer for the JPEG file and select Open to attach the photo to the selected Line Item

Delete an Inspection

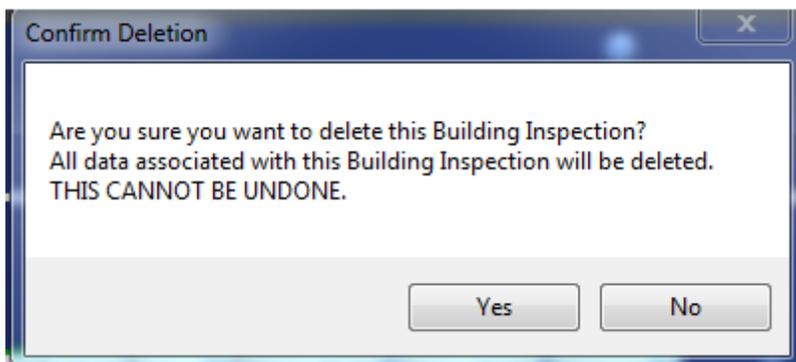
You can delete an inspection record at any time. However, once the record is deleted this action cannot be undone or restored.

To delete an inspection:

- 1) From the Inspection screen, choose an inspection from the **Select Inspection** drop-down menu.
- 2) Click the **Edit Inspection** button at the top of the screen.
- 3) When the Edit Inspection window appears, click the **Delete** button to remove this inspection.



- 4) When the Confirm Deletion window appears, click the **Yes** button.



Manually Enter GPNA Data into an Inspection

To manually enter GPNA data in an inspection:

- 1) From the Control Panel, choose your PNA and then select the Development/AMP from the Development/AMPs column of the Control Panel.
- 2) Continue by selecting the relevant Site, Building Set, Unit Set, and Common Area Set until you locate the component that requires the inspection data.
- 3) Click the **Inspect** button underneath the selected component to open the Inspection window for that component.
- 4) Choose an inspection from the **Select Inspection** drop-down menu.

- 5) Click the **Perform Action** drop-down menu, select **Add Takeoffs from Pre-Assessment** and click the **Go** button.

- 6) Click on each Line Item for which you want to enter data.

The Line Item Detail window appears.

Review and update the following fields as appropriate:

- **Description:** Enter a description of the line item. This field is optional.
- **Takeoff:** Enter a take-off amount associated with this line item.
- **Installation Year:** Enter the year that the line item was installed.
- **RUL:** Enter the line item's Remaining Useful Life, in years.

The screenshot shows the 'Line Item Detail' window with the following fields and values:

- Line Item ID: 2110
- Component: Foundations
- Line Item: Crawl Space/4 Ft Foundation
- Description: (empty text box)
- Takeoff: 14136
- Unit of Measure: SF
- Absent:
- Installation Year: (empty text box)
- RUL: 0
- Refurbish %: 0
- Comment: (empty text box)

Buttons at the bottom include 'Cancel', 'Save & Close', and 'Add Attachment'.

Note: At least one of the Installation Year or RUL must be entered. If there is no RUL, then there must be an entry for the Installation Year. If a RUL is entered, then the Installation Year is optional. The RUL takes precedence if both are entered.

- **Replace %:** Enter the percent of the line item that needs to be replaced.
- **Refurbish %:** Enter the percentage of the line item that needs to be refurbished.
- **Comment:** Enter additional information about the line item.
- **Add Attachment:** Click this button to add an image of the line item.

Note: Either Replacement or Refurbishment fields may be disallowed, depending on the Line Item.

- 7) Click the **Save & Close** button when you are finished entering data. The GPNA tool automatically saves the GPNA data

Master Cost Library

The Master Cost Library allows the user to view and edit the Replacement Cost, Refurbishment Cost, and Local Multiplier, replacement EUL and the Refurbish EUL for an HA. It also allows the user to enter the cost data for the master set of line items which will then be copied to all projects within the current GPNA. Once completed, the Master Cost Library saves the user from having to define separate cost libraries for each project. If a development's costs differ from the master, the development's costs can be edited in the Development/AMP Cost Library without affecting the Master or other developments.

Managing Master Cost Library Line Items

The Master Cost Library contains a list of line items that are commonly present on any new Development/AMP's PNA. Changes made to the Master Cost Library do not affect previously created Development/AMPs; rather changes to the Master Cost Library are reflected only in newly created Development/AMP cost libraries

Cost Index

PHAs will select a standard, nationally-recognized cost index such as R.S. Means² or Marshall & Swift. In selecting a cost index to use, certain factors should be considered; including flexibility, ease of use, and standardization. It is recommended that only one source be used in developing the Cost Index to facilitate more efficient subsequent updates. Most cost indices are seen as reliable and accurate; accordingly utilization of multiple cost indices poses no perceivable advantage. The GPNA tool also allows you to input customized costs for any component item. The logic for allowing this action is that a PHA may have recent experience with costs for certain work, such as a recent bid, or recent contractor proposal. These sources would be considered more accurate for the purposes of evaluating the impact of these component costs. The custom cost amount will be entered, along with a brief description of the reason for the inclusion of a custom cost.

Note: Please be aware that any customization of cost indices will generate an “Anomalous Data report” whereby these customized cost indices will be brought to the attention of the PHA for review.

² R.S. Means Col, Inc., RS Means Repair & Remodeling Cost Data, 31st Annual Edition (Kingston, MA: Reed Construction Data, 2009).

EUL Index

The Expected Useful Life or EUL for a GPNA component refers to the period during which a building system or component is expected to be useful. EUL durations are a part of the GPNA cost and EUL component libraries in the GPNA tool. As with the Cost Index, the PHA will select a recognized EUL to input into the GPNA. Industry-recognized EULs include R.S. Means, Whitestone Research, and McGraw-Hill Construction (Dodge) indices. PHAs will use cost and EUL data from a nationally recognized index and they may customize it with local data.

The EUL is used within the GPNA tool as the basis for the replacement of components as they approach obsolescence. As part of the GPNA process, information on the installation date of components is collected, and the remaining EUL is based on this installation date. Setting the standard that all EUL within the library should reflect the building components, true EUL ensures that calculations are accurate. The GPNA allows for unique cases where the EUL requires adjustment for local circumstances. The GPNA tool allows for adjustments of EUL for refurbishment of a component. These unique cases are recorded in the variance report within the PHA's GPNA.

Soft Cost and Markup Considerations

Soft costs (overhead, general conditions, profit) should be included by the PHA in submitted costs. Soft costs are included in estimates provided by industry specialists (e.g., R.S. Means). For most cost indices, estimations include materials, labor, equipment, general conditions, overhead, and profit. Other soft costs such as A&E, administrative fees, and expenses for relocation should not be included in a PHA's estimations in its GPNA.

General conditions, when applicable, for the building contractor may range from 0% to 10% of the total cost, including overhead and profit. For general or prime contractors, costs for general conditions may range from 5% to 15% of the total cost, including overhead and profit. Overhead and profit are, in most cases, the sum of the basic material costs plus 10% for profit, the basic labor costs plus total overhead and profit, and the basic equipment cost plus 10% for profit.

PHAs that do their own cost estimating through contractors or through in-house staff, should add markup costs consistent with the markup standards of their chosen cost index. PHAs should not include costs associated with PHA administrative, relocation, or design fees.

Inflation (or cost of living increase [COLA]) will not be assumed or projected since it is not projected for the Capital Fund grant. Since the GPNA will be updated every five years, costs will be adjusted at a five-year interval. The advantage of not showing in-

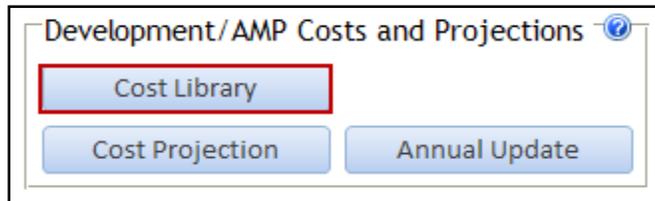
flation is to enable a better evaluation of fluctuations in needs throughout the 20 year period.

Component Category Filter

From the Cost Library screen, the Component Category filter is used to view line items by component type.

To filter line items by Component category:

- 1) Start in Control Panel, select desired Development/AMP from the **Development/AMPs** menu.
- 2) Click the **Cost Library** button in the Development/AMP “Costs and Projections” located in the center-top section of the Control Panel.



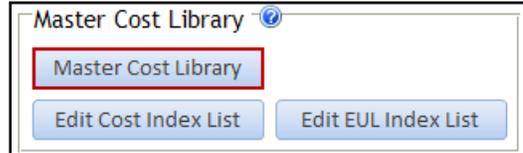
- 3) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu, located at the top-left. The line items for the selected component will appear.

Line Item ID	Component	Description	Unit of Measure	Replace Cost	Refurbish Cost	Local Multiplier	Replace EUL	Refurb EUL	Markup %
1010	Fencing and Gates	Building Exterior	LF	\$31.00	\$8.00	1	6	4	0
1011	Fencing and Gates	Building Systems	LF	\$7.00	\$1.00	1	4	2	0
1012	Fencing and Gates	Common Areas	LF	\$79.00	\$21.00	1	19	18	0
1021	Fencing and Gates	Unit	LF	\$87.00	\$52.00	1	13	7	0
1109	Fencing and Gates	Wood	LF	\$60.00		1	6	0	0
1110	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	SF	\$0.00	\$32.00	1	0	3	0
1120	Grounds	Earthwork	SF	\$1.00	\$1.00	1	16	8	0
1130	Grounds	Landscaping	Each	\$0.00	\$41.00	1	0	4	0
1140	Grounds	Trees, Trimming	SF	\$6.00	\$0.00	1	18	0	0
1150	Grounds	Land and Grounds: Irrigation	SF	\$77.00	\$5.00	1	4	1	0
1210	Mailboxes/Project Signs	Desert Landscaping	Each	\$78.00	\$67.00	1	11	3	0
1220	Mailboxes/Project Signs	Site Signage	Each	\$2.00	\$0.00	1	1	0	0
1230	Storage	Mail Boxes	SF	\$89.00	\$25.00	1	9	2	0
1310	Parking Lots/Driveways/Roads	Storage Sheds	SF	\$0.00	\$9.00	1	0	13	0
1320	Parking Lots/Driveways/Roads	Pressure Wash Chemical	LF	\$0.00	\$13.00	1	0	2	0
1330	Parking Lots/Driveways/Roads	Parking Stripes And Curb Painting (Traffic Paint)	SF	\$27.00	\$4.00	1	16	2	0
1331	Parking Lots/Driveways/Roads	Parking, Re-Surface or Replace Asphalt Paving	SF	\$0.00	\$54.00	1	0	19	0
1340	Parking Lots/Driveways/Roads	Parking, Asphalt (Sealing)	Each	\$59.00	\$0.00	1	7	0	0
		Parking, Precast Wheelstops							

Edit the Master Cost Library

To edit the Master Cost Library:

- 1) From the Master Cost Library section of the Control Panel, click the Master Cost Library button.



The Master Cost Library for GPNA window appears.

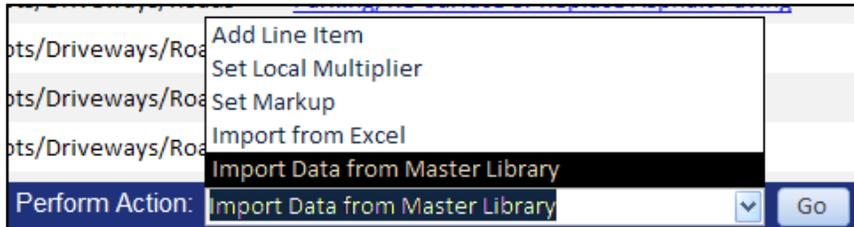
Line Item ID		Component	Line Item	Unit of Measure	Replace Cost	Refurbish Cost	Local Multiplier	Replace EUL	Refurb EUL	Markup %		
1010	Fencing and Gates	Chain Link	LF	\$11.00	\$4.00	1	1	1	0		Update Dev/Amps	Info
1011	Fencing and Gates	Wrought Iron	LF	\$57.00	\$18.00	1	15	3	0		Update Dev/Amps	Info
1012	Fencing and Gates	Wood	LF	\$61.00	\$10.00	1	2	2	0		Update Dev/Amps	Info
1110	Grounds	Earthwork	SF	\$0.00	\$12.00	1	0	6	0		Update Dev/Amps	Info
1120	Grounds	Landscaping	SF	\$1.00	\$1.00	1	8	7	0		Update Dev/Amps	Info
1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	SF	\$73.00	\$67.00	1	19	18	0		Update Dev/Amps	Info
1130	Grounds	Trees, Trimming	Each	\$0.00	\$38.00	1	0	12	0		Update Dev/Amps	Info
1140	Grounds	Land and Grounds: Irrigation	SF	\$77.00	\$0.00	1	6	0	0		Update Dev/Amps	Info
1150	Grounds	Desert Landscaping	SF	\$5.00	\$4.00	1	12	5	0		Update Dev/Amps	Info
1210	Mailboxes/Project Signs	Site Signage	Each	\$29.00	\$27.00	1	17	9	0		Update Dev/Amps	Info
1220	Mailboxes/Project Signs	Mail Boxes	Each	\$46.00	\$0.00	1	3	0	0		Update Dev/Amps	Info
1230	Storage	Storage Sheds	SF	\$33.00	\$14.00	1	18	15	0		Update Dev/Amps	Info
1310	Parking Lots/Driveways/Roads	Pressure Wash Chemical	SF	\$0.00	\$86.00	1	0	6	0		Update Dev/Amps	Info
1320	Parking Lots/Driveways/Roads	Parking Stripes And Curb Painting (Traffic Paint)	LF	\$0.00	\$93.00	1	0	20	0		Update Dev/Amps	Info
1330	Parking Lots/Driveways/Roads	Parking, Re-Surface or Replace Asphalt Paving	SF	\$26.00	\$2.00	1	4	1	0		Update Dev/Amps	Info
1331	Parking Lots/Driveways/Roads	Parking, Asphalt (Sealing)	SF	\$0.00	\$85.00	1	0	9	0		Update Dev/Amps	Info
1340	Parking Lots/Driveways/Roads	Parking, Precast Wheelstops	Each	\$16.00	\$0.00	1	15	0	0		Update Dev/Amps	Info
1350	Parking Lots/Driveways/Roads	Parking Area Concrete	SF	\$12.00	\$10.00	1	14	9	0		Update Dev/Amps	Info

- 2) For each Line Item, you can update the following fields:
 - **Replace Cost:** The estimated cost it takes to replace one unit of measure of a line item.
 - **Refurbish Cost:** The estimated cost it takes to refurbish one unit of measure of a line item.
 - **Local Multiplier:** The ratio of the average cost and the cost of that area.
 - **Replace EUL:** The estimated service life of the new item if it were replaced.
 - **Refurb EUL:** The estimated remaining service life of an item if it were repaired.
- 3) Click the **Update Dev/Amps** button after you update each line item.
- 4) To view detailed information about each line item, click the **Info** button next to each line item.

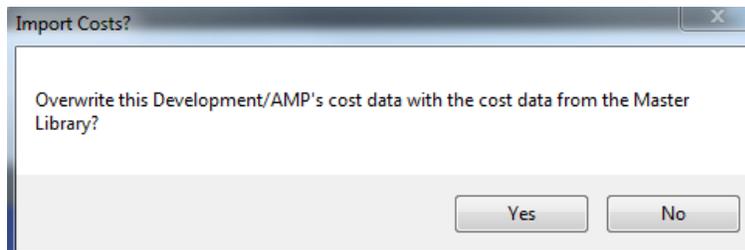
Import Data from the Master Cost Library

To replace Cost Library with data imported from the Master Cost Library:

- 1) Click the **Cost Library** button from the Control Panel
- 2) Click the **Perform Action** drop-down at the bottom of the screen, select **Import Data from Master Library** and click the **Go** button.



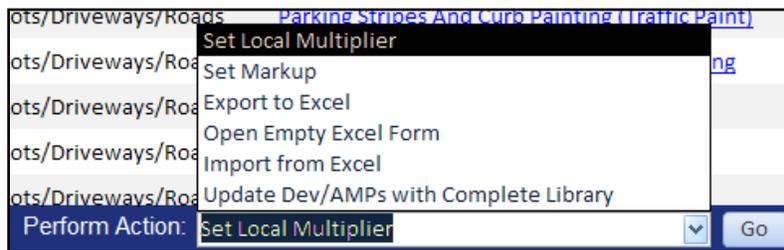
- 3) When the “**Import Costs?**” window appears, click **Yes** to overwrite this Development/AMPs cost data with the cost data from the Master Library or to cancel click **No**.



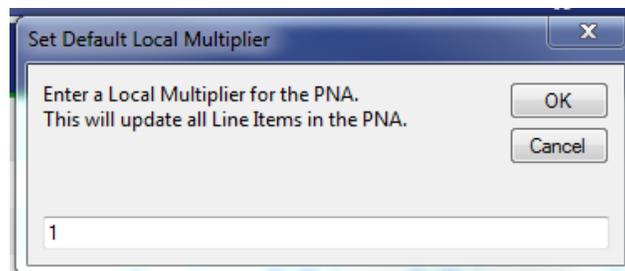
Set the Local Multiplier for the Master Cost Library

To set the local multiplier for the Master Cost Library:

- 1) Click the **Master Cost Library** button from the Control Panel to display the Master Cost Library for GPNA window.
- 2) Click the **Perform Action** drop-down at the bottom of the screen, select **Set Local Multiplier**, and click the **Go** button.



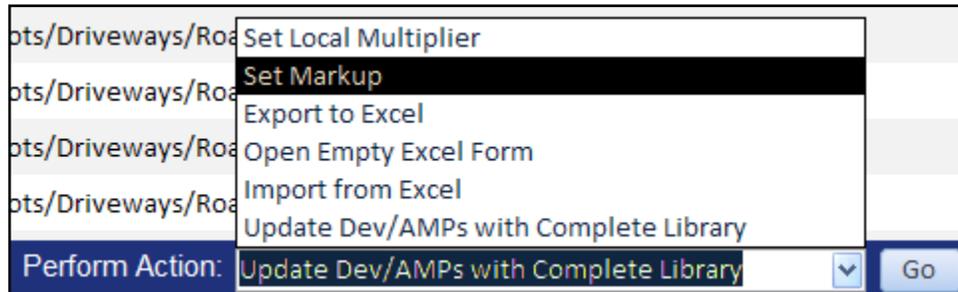
- 3) When the Set Default Local Multiplier window appears, enter the multiplier for the HA and click the **OK** button.



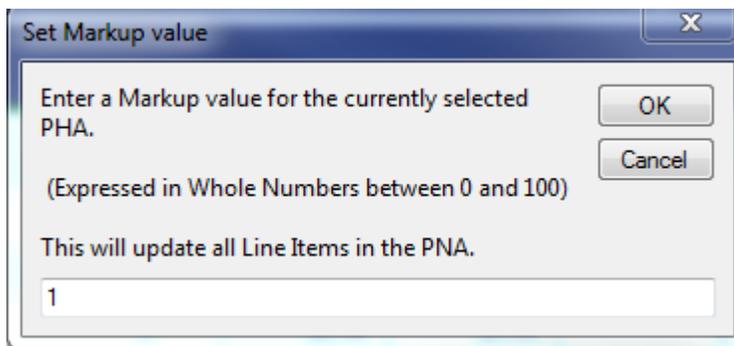
Set the Markup for the Master Cost Library

To set the markup for the Master Cost Library:

- 1) Click the **Master Cost Library** button from the Control Panel to display the Master Cost Library for GPNA window.
- 2) Click the **Perform Action** drop-down at the bottom of the screen, select **Set Markup** and click the **Go** button.



- 3) When the Set Markup Value window appears, enter the markup for the HA and click the **OK** button.

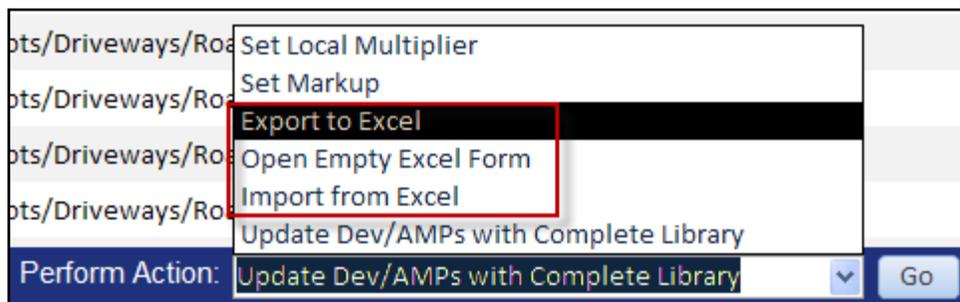


Export, Import, or Open an Empty Excel File for the Master Cost Library

Note: The major benefit of the export and import process is that it gives the end user the ability to have multiple staff working on the same GPNA, and the ability to move data from a previous GPNA into the tool in a compatible format.

To export, import, or open an empty Excel file for the Master Cost Library:

- 1) Click the **Master Cost Library** button from the Control Panel to display the Master Cost Library window
- 2) Click the **Perform Action** drop-down at the bottom of the screen, select one of the following, and click the **Go** button:
 - **Export to Excel:** Opens the Master Cost Library in an Excel spreadsheet.
 - **Open Empty Excel Form:** Opens the Master Cost Library....
 - **Import from Excel:** Allows you to import a locally-saved Master Cost Library into the GPNA tool.

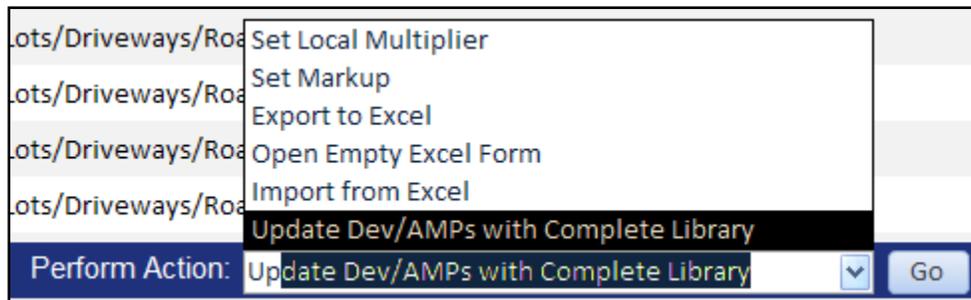


Update Dev/AMPs with the Complete Library

Changes and updates may be made to either the Master Cost Library or individual Development/AMP Cost libraries. To edit or update several Development/AMP cost libraries simultaneously, first make edits to the Master Cost library and then Update the selected Development/AMP with the complete Master Cost Library.

To update the Dev/AMPs with the complete Master Cost Library:

- 1) Click the **Master Cost Library** button from the Control Panel to display the Master Cost Library for GPNA window.
- 2) Click the **Perform Action** drop-down at the bottom of the screen, select **Update Dev/AMPs with Complete Library** and click the **Go** button.



- 3) When the “**Update all libraries?**” window appears, click **Yes** to overwrite all copies of all line items for all Projects in your PNA or click **No** to cancel.

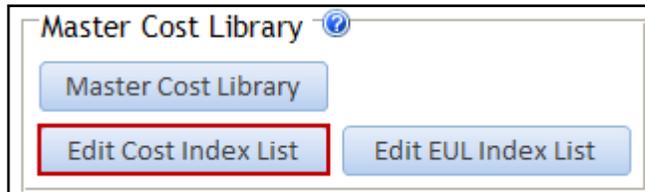
Edit the Cost Index

To edit the Cost Index:

1) Starting in the **Control Panel**

Select **Edit Cost Index List** from the **Master Cost Library** section, located in the top-left corner.

A new window “**Edit Cost Index**” should open.



The Edit Cost Index window appears

- 2) Select the Cost Index you want to edit from the **Select Cost Index** drop-down and edit the fields in this window as necessary.
- 3) When you are finished, click the **Save** button. If you wish to remove the cost index that is currently displaying in the Edit Cost Index window, click the **Delete** button.

 A screenshot of the 'Edit Cost Index' window. The title bar says 'CostIndexEdit'. The main title is 'Edit Cost Index'. There is a dropdown menu for 'Select Cost Index' with 'RSMeans' selected. To the right of the dropdown is an 'Add Cost Index' button with a help icon. Below the dropdown are three text input fields: 'Cost Index Name' (containing 'RSMeans'), 'Cost Index Title' (containing 'Repair & Remodeling Cost'), and 'Year Published' (containing '2011'). At the bottom are three buttons: 'Delete', 'Cancel', and 'Save'.

If the Cost Index you want to edit is not in the drop-down for this field:

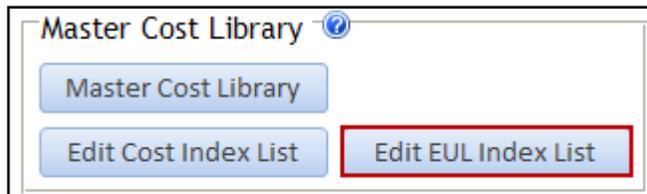
- 1) Click the **Add Cost Index** button.
- 2) When the Add Cost Index button appears, fill out the **Name, Title, and Year Published** fields, and click the **Add** button. The new Cost Index now appears in the **Select Cost Index** drop-down of the Edit Cost Index window.

 A screenshot of the 'Add Cost Index' window. The title bar says 'CostIndexAdd'. The main title is 'Add Cost Index'. There are three text input fields: 'Cost Index Name', 'Cost Index Title', and 'Year Published'. At the bottom are two buttons: 'Add' and 'Cancel'.

Edit the EUL Index

To edit the EUL Index:

- 1) From the Master Line Item section of the Control Panel, click the **Edit EUL Index List** button.



The Edit EUL Index window appears.

 A screenshot of a window titled "EULIndexEdit" with the main heading "Edit EUL Index". It features a dropdown menu labeled "Select EUL Index:" with "RSMeans" selected. To the right of the dropdown is an "Add EUL Index" button with a help icon. Below the dropdown are three text input fields: "EUL Index Name:" (containing "RSMeans"), "EUL Index Title:", and "Year Published:". At the bottom are three buttons: "Delete", "Cancel", and "Save".

- 2) Select the EUL Index you want to edit from the **Select EUL Index** drop-down and edit the fields in this window as necessary.
- 3) When you are finished, click the **Save** button. If you wish to remove the cost index that is currently displaying in the Edit EUL Index window, click the **Delete** button.
- 4) If the EUL Index you want to edit is not in the drop-down for this field:
- 5) Click the **Add EUL Index** button.
- 6) When the Add EUL Index button appears, fill out the **Name**, **Title**, and **Year Published** fields, and click the **Add** button. The new EUL Index now appears in the **Select EUL Index** drop-down of the Edit EUL Index window.

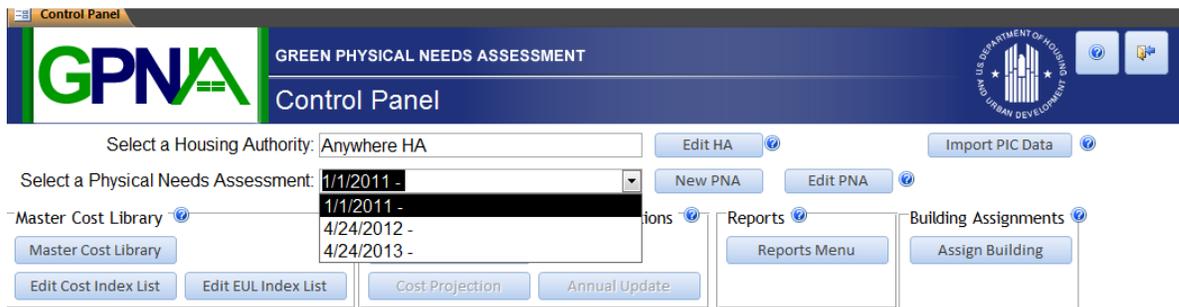
 A screenshot of a window titled "EULIndexAdd" with the main heading "Add EUL Index". It features three text input fields: "EUL Index Name:", "EUL Index Title:", and "Year Published:". At the bottom are two buttons: "Add" and "Cancel".

Edit Costs and Estimated Useful Life (EUL)

Changes made to the Cost Library only affect the Development/AMP selected from the Control Panel.

To adjust line item Costs and Estimated Useful Life (EUL) values:

- 1) From the Control Panel, select a GPNA from the **Select a Physical Needs Assessment** list.



- 2) First select a Development/AMP from the **Development/AMPs** column, and then click the **Cost Library** button-located on the right side of the screen.
- 3) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu. The line items for the selected component appear.

Line Item ID	Component	Description	Unit of Measure	Replace Cost	Refurbish Cost	Local Multiplier	Replace EUL	Refurb EUL	Markup %
1010	Fencing and Gates	Building Exterior Building Systems Common Areas	LF	\$31.00	\$8.00	1	6	4	0
1011	Fencing and Gates	Unit	LF	\$7.00	\$1.00	1	4	2	0
1012	Fencing and Gates	Wood	LF	\$79.00	\$21.00	1	19	18	0
1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	SF	\$87.00	\$52.00	1	13	7	0
1109	Fencing and Gates	Fencing	LF	\$60.00		1	6		0
1110	Grounds	Earthwork	SF	\$0.00	\$32.00	1	0	3	0
1120	Grounds	Landscaping	SF	\$1.00	\$1.00	1	16	8	0
1130	Grounds	Trees, Trimming	Each	\$0.00	\$41.00	1	0	4	0
1140	Grounds	Land and Grounds: Irrigation	SF	\$6.00	\$0.00	1	18	0	0
1150	Grounds	Desert Landscaping	SF	\$77.00	\$5.00	1	4	1	0
1210	Mailboxes/Project Signs	Site Signage	Each	\$78.00	\$67.00	1	11	3	0
1220	Mailboxes/Project Signs	Mail Boxes	Each	\$2.00	\$0.00	1	1	0	0
1230	Storage	Storage Sheds	SF	\$89.00	\$25.00	1	9	2	0
1310	Parking Lots/Driveways/Roads	Pressure Wash Chemical	SF	\$0.00	\$9.00	1	0	13	0
1320	Parking Lots/Driveways/Roads	Parking Stripes And Curb Painting (Traffic Paint)	LF	\$0.00	\$13.00	1	0	2	0
1330	Parking Lots/Driveways/Roads	Parking, Re-Surface or Replace Asphalt Paving	SF	\$27.00	\$4.00	1	16	2	0
1331	Parking Lots/Driveways/Roads	Parking, Asphalt (Sealing)	SF	\$0.00	\$54.00	1	0	19	0
1340	Parking Lots/Driveways/Roads	Parking, Precast Wheelstops	Each	\$59.00	\$0.00	1	7	0	0

- 4) To adjust costs and Estimated Useful life values for a specific Line Item, select a Line Item from the **Line Item** column.

Line Item ID	Component	Line Item	Description	Unit of Measure	Replace Cost	Refurbish Cost	Local Multiplier	Replace EUL	Refurb EUL
0001	Fencing and Gates	Green Item		LF	\$50.00	\$0.00	1	5	0
002	Fencing and Gates	Marketability Item		LF	\$10.00	\$0.00	1	5	0
003	Fencing and Gates	Accessibility Item		LF	\$10.00	\$0.00	1	5	0
1010	Fencing and Gates	Chain Link		LF	\$5.00	\$2.00	1	5	3
1011	Fencing and Gates	Wrought Iron		LF	\$10.00	\$5.00	1	5	3

The Cost Library Detail screen appears.

Cost Library Detail

Line Item Data

Needs Type: Replacement
 Component Category: Site
 Line Item: Chain Link
 Unit of Measure: LF

Line Item ID: 1010
 Component: Fencing and Gates
 Description:

Replace & Refurbish Costs

Cost Index Used: [Dropdown]
 Cost Index Reference: [Text]
 Replacement Cost: \$5.00 [Up/Down] Cost Index
 Refurbish Cost: \$2.00 [Up/Down] HA Estimate
 Local Multiplier: 1 [Up/Down] Bid

Local Replacement Cost:
 Local Refurbish Cost:
 Cost Notes: [Text]

Estimated Useful Life

EUL Index Used: [Dropdown]
 EUL Index Reference: [Text]
 Replacement EUL: 5 [Up/Down] EUL Index
 Refurbish EUL: 3 [Up/Down] HA Estimate
 EUL Notes: [Text]

Cancel Save

- 5) In the **Line Item Data** section of the Cost Library Detail screen, enter a brief summary of the Line Item.
- 6) In the **Replace & Refurbish Costs** section of the Cost Library Detail screen, select the type of estimate for the item:
 - **Cost Index:** Costs are determined from an industry standard Cost Index such as RS Means.
 - **HA Estimate:** Costs are estimated by the Housing Authority.
 - **Bid:** Cost estimates are from a vendor.

Note: The GPNA tool automatically disallows some refurbishment and/or replacement fields for various line items based on applicability and/or eligibility. Accordingly, some items may not have all replacement or refurbishment options available.

- 7) To determine costs from a Cost Index, selected the **Cost Index Used** button and edit the **Local Multiplier**.
 - **Local Multiplier:** The ratio of the average cost and the cost of the item in the area of the Development/AMP location.
- 8) In the **Replace & Refurbish Costs** section of the Cost Library Detail screen, enter the **Cost Index Reference**, **Replacement Cost**, **Refurbish Cost**, and Cost Notes.
 - **Cost Index Reference:** The unique ID or reference found in the Cost Index for this specific item.
 - **Replacement Cost:** The estimated cost to replace one unit of measure for the line item.
 - **Refurbish Cost:** The estimated cost to repair or refurbish one unit of measure for the line item.
- 9) In the **Estimated Useful Life** section of the Cost Library Detail screen, select the type of estimate for the item:
 - **EUL Index:** EUL is based on an industry standard EUL Index such as RS Means.
 - **HA Estimate:** EUL is estimated by the Housing Authority.
 - **Bid:** EUL estimates supplied by a vendor.
- 10) In the **Replace & Refurbish Costs** section of the Cost Library Detail screen, enter the EUL Index Reference, Replacement EUL, Refurbish EUL, and EUL Notes.
 - **EUL Index Reference:** The unique ID or reference found in the EUL Index for this specific item.
 - **Replacement EUL:** The estimated service life of the item after it is replaced.
 - **Refurbish EUL:** The estimated service life of the item after it is refurbished or repaired.
- 11) Click the **Save & Close** button when you are finished editing relevant fields. The updated cost details and EUL appear on the Cost Library screen for that line item.
- 12) The following cost details can also be entered or updated directly on the Cost Library screen for each line item:
 - Description
 - Replace Cost
 - Refurbish Cost
 - Local Multiplier
 - Replace EUL
 - Refurb EUL

Add a Line Item to the Cost Library

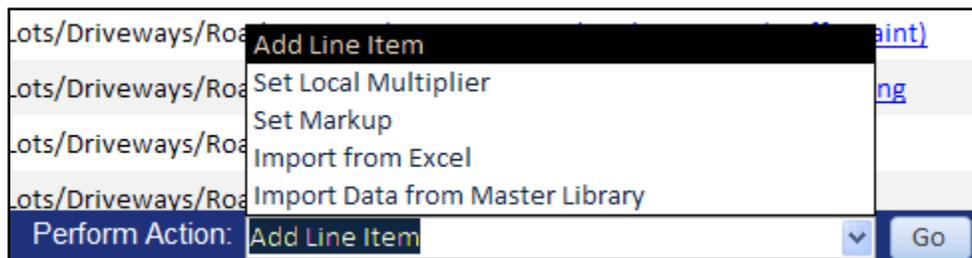
The Cost Library contains line items from the recorded GPNA inspection data. From the Cost Library screen, new line items can be added.

To add a line item:

- 1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.
- 2) Select a Development/AMP from the **Development/AMPs** column.
- 3) Click the **Cost Library** button in the Development/AMP Costs and Projections section of the Control Panel screen.
- 4) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu. The line items for the selected component appear.

Line Item ID	Component	Description	Unit of Measure	Replace Cost	Refurbish Cost	Local Multiplier	Replace EUL	Refurb EUL	Markup %
1	Play Areas and Equipment	Chain Link	LF	\$5.00	\$0.00	1	10	0	0
1010	Fencing and Gates	Unit	LF	\$1.00	\$1.00	1	1	1	0
1010	Play Areas and Equipment	Chain Link	LF	\$1.00	\$1.00	1	10	10	0
1010	Play Areas and Equipment	Chain Link	LF	\$1.00	\$1.00	1	1	1	0
1011	Fencing and Gates	Wrought Iron	LF	\$1.00	\$1.00	1	1	1	0
1012	Fencing and Gates	Wood	LF	\$1.00	\$1.00	1	1	1	0
1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	SF	\$1.00	\$1.00	1	1	1	0
1109	Fencing and Gates	Fencing	LF	\$60.00		1	6		0
111	Fencing and Gates	111	LF	\$200.00	\$0.00	1	6		0
1110	Grounds	Earthwork	SF	\$0.00	\$1.00	1	0	1	0
1111	Fencing and Gates	214	LF	\$10.00		1	5		0
1111	Fencing and Gates	temp	LF	\$10.00		1	5		0
11111	Fencing and Gates	11111	LF	\$2.00	\$0.00	1	2		0
1120	Grounds	Landscaping	SF	\$1.00	\$1.00	1	1	1	0
1130	Grounds	Trees, Trimming	Each	\$0.00	\$1.00	1	0	1	0
1140	Grounds	Land and Grounds: Irrigation	SF	\$1.00	\$0.00	1	1	1	0
1150	Grounds	Desert Landscaping	SF	\$1.00	\$1.00	1	1	1	0
1210	Mailboxes/Project Signs	Site Signage	Each	\$1.00	\$1.00	1	1	1	0

To add a new line item, select **Add Line Item** from the **Perform Action** drop-down menu and click the **Go** button.



The Add Line Item screen appears.

Line Item ID	Component	Line Item	Description
0001	Fencing and Gates	Green Item	
002	Fencing and Gates	Marketability Item	
003	Fencing and Gates	Accessibility Item	
1010	Fencing and Gates	Chain Link	
1011	Fencing and Gates	Wrought Iron	
1012	Fencing and Gates	Wood	
1021	Grounds	Lawns - Fertilizers Re-Seed & Fin	
1110	Grounds	Earthwork	
1120	Grounds	Landscaping	
1130	Grounds	Trees, Trimming	
1140	Grounds	Land and Grounds: Irrigation	
1150	Grounds	Desert Landscaping	
1210	Mailboxes/Project Signs	Site Signage	
1220	Mailboxes/Project Signs	Mail Boxes	
1230	Storage	Storage Sheds	
1310	Parking Lots/Driveways/Roads	Pressure Wash Chemical	
1320	Parking Lots/Driveways/Roads	Parking Stripes And Curb Paintin	
1330	Parking Lots/Driveways/Roads	Parking, Re-Surface or Replace A	
1331	Parking Lots/Driveways/Roads	Parking, Asphalt (Sealing)	
1340	Parking Lots/Driveways/Roads	Parking, Precast Wheelstops	

Note: You can double-click on an existing line item on the right of the Add Line Item screen to copy an existing Line Item's details to the new Line Item.

- 5) Select the type of Component from the **Component** drop-down menu or click the **New Component** button to enter the name of a new component.
- 6) Complete the **Line Item ID**, **Line Item Name**, and **Description** fields.
- 7) Select the units from the **Unit of Measure** drop-down menu.
- 8) Select the **Cost Data Source** and **Cost Index** standards used to estimate the cost.
- 9) Enter the **Cost Index Reference**, **Replacement Cost**, **Refurbishment Cost**, and **Local Multiplier**.
- 10) Select the **EUL Data Source** and **EUL Index** standards used to estimate the useful life.
- 11) Enter the **EUL Index Reference**, **Replacement EUL**, and **Refurbishment EUL**.
- 12) When you are finished, click the **Insert Line Item** button at the bottom of the window to add the item to the Cost Library.

Note: To clear and reset the data entered on the Add Line Item screen, click the **Reset Form** button.

Set the Default Local Multipliers

Each line item in the Cost Library can have its own associated local multiplier.

The Local Multiplier represents the ratio of the generic or average cost to the local cost of a line-item. This ratio allows for the adjustment of cost estimates based on different price regions and provides for more accurate cost projections.

If many components or items are available in the same region or location, then you can set one Local Multiplier as the default value, which is then stored for every line item of the Development/AMP.

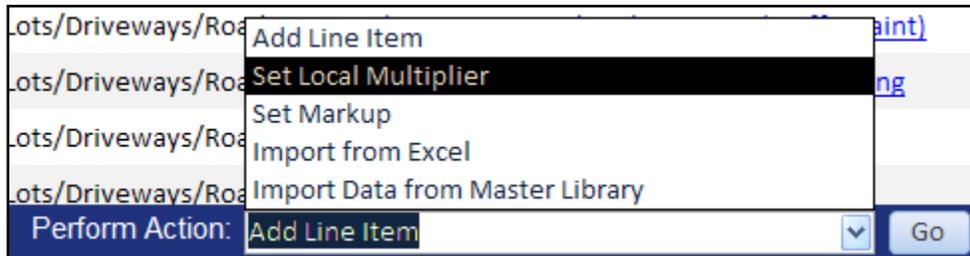
To set the Default Local Multiplier for all line items of a Development/AMP:

- 1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.
- 2) Select a Development/AMP from the **Development/AMPs** column.
- 3) Click the **Cost Library** button in the Development/AMP Costs and Projections section of the Control Panel screen.
- 4) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu. The line items for the selected component appear.

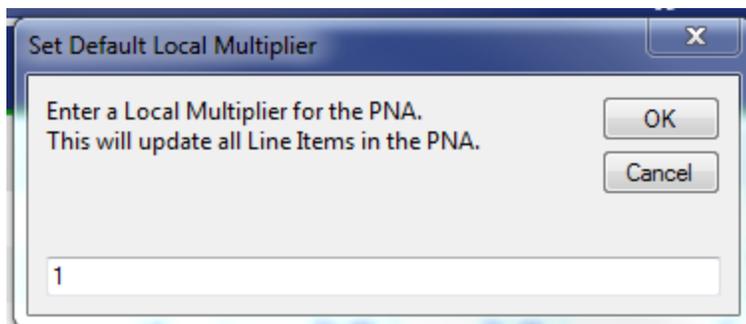
Line Item ID	Component	Description	Unit of Measure	Replace Cost	Refurbish Cost	Local Multiplier	Replace EUL	Refurb EUL	Markup %
1010	Fencing and Gates	Unit	LF	\$1.00	\$1.00	1	1	1	0
1010	Play Areas and Equipment	Chain Link	LF	\$1.00	\$1.00	1	10	10	0
1010	Play Areas and Equipment	Chain Link	LF	\$1.00	\$1.00	1	1	1	0
1011	Fencing and Gates	Wrought Iron	LF	\$1.00	\$1.00	1	1	1	0
1012	Fencing and Gates	Wood	LF	\$1.00	\$1.00	1	1	1	0
1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	SF	\$1.00	\$1.00	1	1	1	0
1109	Fencing and Gates	Fencing	LF	\$60.00		1	6		0
111	Fencing and Gates	111	LF	\$200.00	\$0.00	1	6		0
1110	Grounds	Earthwork	SF	\$0.00	\$1.00	1	0	1	0
1111	Fencing and Gates	214	LF	\$10.00		1	5		0
1111	Fencing and Gates	Temp	LF	\$10.00		1	5		0
11111	Fencing and Gates	11111	LF	\$2.00	\$0.00	1	2		0
1120	Grounds	Landscaping	SF	\$1.00	\$1.00	1	1	1	0
1130	Grounds	Trees, Trimming	Each	\$0.00	\$1.00	1	0	1	0
1140	Grounds	Land and Grounds: Irrigation	SF	\$1.00	\$0.00	1	1	1	0
1150	Grounds	Desert Landscaping	SF	\$1.00	\$1.00	1	1	1	0
1210	Mailboxes/Project Signs	Site Signage	Each	\$1.00	\$1.00	1	1	1	0

To set the default Local Multiplier value

- 1) Select **Set Local Multiplier** from the **Perform Action** drop-down menu, click the **Go** button.



The Set Default Local Multiplier window appears.



- 2) Enter the Local Multiplier value.
- 3) Click the **OK** button.

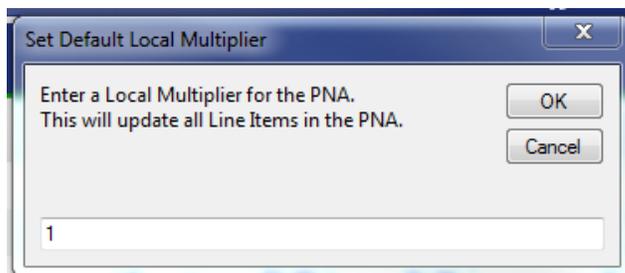
A default value has now been set for all Local Multipliers.

Set the Markup Value

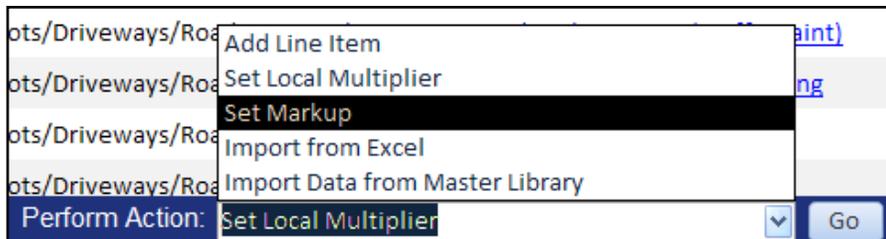
The Markup Value is a percentage applied to the original cost of the item to account for additional hidden fees. The Markup Value is a default number that is applied to all line items for the selected Development/AMP. If the Markup Value is 20 percent, then each line item cost is decreased by 20 percent.

To set the Markup Value:

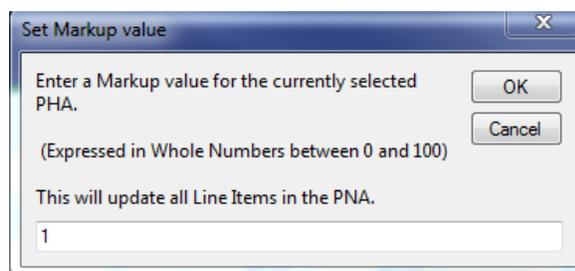
- 1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.
- 2) Select a Development/AMP from the **Development/AMPs** column.
- 3) Click the **Cost Library** button in the Development/AMP Costs and Projections section of the Control Panel screen.
- 4) When the Cost Library screen opens, select a component from the **Component Category** drop-down menu. The line items for the selected component appear.



- 5) Select **Set Markup** from the **Perform Action** drop-down menu, Click the **Go** button.



- 6) Enter the markup value in the field and click the **OK** button.



Cost Projection

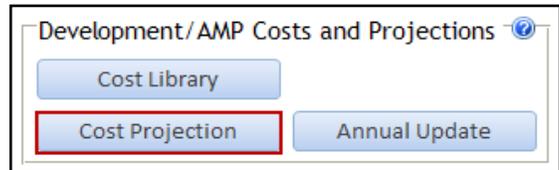
The Cost Projection function is used in developing a timeline or schedule of estimated future costs based on the recommendations for replacement and refurbishment derived from GPNA observations and data. Cost projections are estimates based on approximate Remaining Useful Life (RUL) values for each line item, and do not represent the actual cost of each item.

The Cost Projection Schedule allows new items to be added and existing items to be upgraded in order to increase the sustainability, marketability, and accessibility of the HA Development/AMP, and then view the cost impact of those new items.

After the Development/AMP needs are evaluated, you can view the cost projections for each item and the total costs for the Development/AMP over a 20 year timeline.

To view the Cost Projection Schedule:

- 1) Start in the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select desired GPNA from the list.
- 2) Select a Development/AMP from the Development/AMPs column.
- 3) Click the **Cost Projection** button



The Projection screen opens and displays Cost Projection data for the selected Development/AMP.

GPNA		GREEN PHYSICAL NEEDS ASSESSMENT		Projection for Development/AMP: Dev2468																					
All Needs				Run Inspection Projections																		Edit Needs Type: Replacement Needs		Go	
ID	Component	Line Item	RUL	UoM	Immediate		Year 1		Year 2		Year 3		Year 4		Year 5										
					Qty.	Cost	Qty.	Cost	Qty.	Cost	Qty.	Cost	Qty.	Cost											
1010	Fencing and Gates	Chain Link	5LF	5	\$55.00	5	\$55.00	5	\$55.00	5	\$55.00	5	\$55.00	5	\$55.00	18	\$198.00								
1010	Fencing and Gates	Chain Link	5LF	8	\$32.00	8	\$32.00	8	\$32.00	8	\$32.00	8	\$32.00	8	\$32.00	8	\$32.00								
1054	Grounds	Grass Trees	21 Each	10	\$300.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
1610	Retaining Walls	Retaining Wall - Concrete	11SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
1770	Walkways/Steps	Ramps	4SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	10	\$420.00	0	\$0.00	0	\$0.00								
1930	Storm Drainage	Storm Drain Lines	0LF	75	\$6,600.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2130	Foundations	Slab On Grade - On Grade	5SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	92	\$1,104.00								
2131	Foundations	Slab On Grade - Below Grade	4SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	81	\$5,427.00	81	\$5,427.00	0	\$0.00								
2140	Structure	Floor Structural System	2SF	0	\$0.00	0	\$0.00	55	\$4,895.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2150	Structure	Roof Structural System	1SF	0	\$0.00	2	\$80.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2160	Structure	Wall/Beam/Column Structural System	0SF	26	\$78.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2220	Roofs	Asphalt Shingles	1SF	0	\$0.00	23	\$161.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2221	Roofs	Tile Or Wood Shake Shingles	5SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	2	\$172.00								
2222	Roofs	Internal Roof	2SF	0	\$0.00	0	\$0.00	79	\$6,952.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2223	Roofs	Built-Up/Membrane	9SF	0	\$0.00	0	\$0.00	0	\$0.00	68	\$6,596.00	0	\$0.00	68	\$6,596.00	0	\$0.00								
2230	Roofs	Parapet Wall	2SF	0	\$0.00	0	\$0.00	37	\$1,591.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2240	Roofs	Penthouse	8SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2250	Roofs	Hatches/Skylights	0 Each	7	\$672.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2260	Roofs	Roof Drainage Interior (Roof Drains and Pipes)	6LF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2261	Roofs	Roof Drainage Exterior (Gutter And Fascia)	7LF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2270	Roofs	Exterior Covered Areas	7SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2310	Walls	Brownstone/Stone Veneer	2SF	0	\$0.00	0	\$0.00	48	\$48.00	0	\$0.00	48	\$48.00	0	\$0.00	0	\$0.00								
2311	Walls	Glass Block	1SF	0	\$0.00	2	\$90.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2312	Walls	Brick Or Concrete Block	7SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2320	Walls	Metal/Glass Curtain Wall/Storefront	3SF	0	\$0.00	0	\$0.00	0	\$0.00	29	\$957.00	0	\$0.00	0	\$0.00	0	\$0.00								
2330	Walls	Pre-Cast Concrete Panel	0SF	98	\$3,234.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2340	Walls	Aluminum Siding	6SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
2341	Walls	Vinyl Siding	9SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00								
TOTALS					Immediate:	\$66,687.00	1:	\$35,885.00	2:	\$27,178.00	3:	\$40,305.00	4:	\$30,301.00	5:	\$37,284.00									

Note: The Cost Projection Schedule allows you to view item quantities and associated costs projections for 20 years. The default view displays the first 5 years.

To navigate forward or backwards within the 20 year timeframe, click the arrow buttons above the Cost Projection Schedule.

Years 6 - 10					
2019 Quantity	2019 Cost	2020 Quantity	2020 Cost	2021 Quantity	2021 Cost
0	\$0.00	0	\$0.00	1000	\$40,000.00

Create or Reset the Development/AMP Cost Projection

This feature allows you to generate projected line items costs for the currently selected project based on both the Inspection and Cost Library data.

If the projection has been generated before, a notification message will appear and ask if you want to recalculate the projected needs for the current project. After the projected line item costs are inserted/recalculated, a projection report will appear to notify you of the results of the performed action. After reviewing the projection report simply click the Close button to continue back to the projection screen with the newly updated data.

To create or reset a cost projection:

- 1) From the Control Panel, click the **Cost Projection** button under Development/AMP Costs and Projections section of the Control Panel screen.
- 2) When the Cost Projection screen opens, click the **Run Inspection Projections** button.

ID	Component	Line Item	RUL	UoM	Qty.	Cost	Immediate		Year 1		Year 2	
							Qty.	Cost	Qty.	Cost	Qty.	Cost
1010	Fencing and Gates	Chain Link	5	LF	5	\$55.00	5	\$55.00	5	\$55.00	5	\$55.00
1010	Fencing and Gates	Chain Link	5	LF	8	\$32.00	8	\$32.00	8	\$32.00	8	\$32.00
1234	Grounds	Peach Trees	21	Each	10	\$100.00	0	\$0.00	0	\$0.00	0	\$0.00
1610	Retaining Walls	Retaining Wall, Concrete	11	SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00
1770	Walkways/Steps	Ramps	4	SF	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00
1930	Storm Drainage	Storm Drain Lines	0	LF	75	\$6,600.00	0	\$0.00	0	\$0.00	0	\$0.00

Edit Line Item Quantity and Cost Details on the Cost Projection

You can adjust the quantities for individual line items and edit the cost projection, including cost details, for each individual line item.

To edit line item quantities and costs:

- 1) From the Control Panel, click the **Cost Projection** button under the Development/AMP Costs and Projections section.
- 2) When the Cost Projection screen opens, select the type of needs from the **Add Line Items** drop-down menu and click the **Add** button.

ID	Component	Line Item	RUL	UoM	Year 1	Year 2	Cost
1010	Fencing and Gates	Chain Link	5	LF	8	8	\$55.00
1010	Fencing and Gates	Chain Link	5	LF	8	8	\$32.00
1234	Grounds	Peach Trees	21	Each	10	0	\$0.00
1610	Retaining Walls	Retaining Wall Concrete	11	SE	0	0	\$0.00

- 3) Adjust the Quantity and Cost for a line item. The fields automatically adjust based on the data you enter.

Line Item ID	Component	Line Item	Replace/Refurb	RUL	Unit of Measure	Immediate Quantity	Immediate Cost	2012 Quantity	2012 Cost
1010	Fencing and Gates	Chain Link	Replace	5	LF	20	\$100.00	10	\$50.00
1011	Fencing and Gates	Wrought Iron	Replace	4	LF	0	\$0.00	0	\$0.00

Edit the RUL, EUL, and Costs for a Line Item

You can adjust the RUL, EUL, and associated costs for each line item.

To edit the cost and useful life details for a line item:

- 1) Click the **Cost Projection** button under the Development/AMP Costs and Projections section of the Control Panel screen.
- 2) When the Cost Projection screen opens, select the type of needs from the **Edit Needs Type** drop-down menu and click the **Go** button.

ID	Component	Line Item	RUL	UoM	Year 1	Year 2	Cost
1010	Fencing and Gates	Chain Link	5	LF	8	8	\$55.00
1010	Fencing and Gates	Chain Link	5	LF	8	8	\$32.00
1234	Grounds	Peach Trees	21	Each	10	0	\$0.00
1610	Retaining Walls	Retaining Wall Concrete	11	SE	0	0	\$0.00

- Click on any of the highlighted line items in the **Line Item column** to adjust the costs for that item.

The **Edit Projection** window appears.

The screenshot shows the 'Edit Projection' window with the following details:

The Line Item Being Edited:

- Needs Type: Replacement
- Component Category: Site
- Component: Fencing and Gates
- Line Item ID: 1012
- Line Item: Wood

Cost Data for the above Line Item:

- Quantity: 100 LF
- Immediate Replace %: 10
- Immediate Refurb %: 10
- Replace Cost Per Unit: \$15.00
- Refurb Cost Per Unit: \$10.00
- RUL: 3
- Projection Type: Refurbishment
- Replace EUL: 5
- Refurb EUL: 3

Projected Cost Over 20 Years:

	Quantity	Cost
Immediate	10	\$100.00
Year 1	0	\$0.00
Year 2	0	\$0.00
Year 3	10	\$100.00
Year 4	0	\$0.00
Year 5	0	\$0.00
Year 6	10	\$150.00
Year 7	0	\$0.00
Year 8	0	\$0.00
Year 9	0	\$0.00
Year 10	0	\$0.00
Year 11	10	\$150.00
Year 12	0	\$0.00
Year 13	0	\$0.00
Year 14	0	\$0.00
Year 15	0	\$0.00
Year 16	10	\$150.00
Year 17	0	\$0.00
Year 18	0	\$0.00
Year 19	0	\$0.00
Year 20	0	\$0.00

Buttons at the bottom: Cancel, Reset Projection, Delete, Save.

- Adjust the appropriate fields. Click the question mark buttons next to a field to view further information about a field/button's functionality.
- To view the Line Item's projected costs, click the **Project Cost Over 20 Years** button.

The table on the right of the screen updates with the new quantities and costs.

- Click the **Save** button to update the Line Item on the Cost Projection Schedule.
- Click the **Delete** button to completely remove the Line Item from the Cost Projection Schedule.

Add Replacement, Marketability, and Accessibility Needs

When calculating future Development/AMP costs, you may need to add additional line items to the Cost Projection Schedule to compare different costs for the same types of items, or to compare existing components with other components that may add functionality

As new items are added, the Cost Projection Schedule adjusts to allow the new costs to be compared over the 20 year timeline.

Site and building systems can be replaced or modernized to increase the overall value, add functionality to existing components, as well as add accessibility features. In order to more easily distinguish between various components, line items containing assessment data are displayed in the following color codes:

Sustainability—green

Marketability/livability—blue

Accessibility—yellow

To add Development/AMP needs to the Cost Projection Schedule:

- 1) Click the **Cost Projection** button under the Development/AMP Costs and Projections section of the Control Panel screen.
- 2) When the Cost Projection screen opens, select the type of needs from the **Add Line Items** drop-down menu and click the **Add** button.

ID	Component	Line Item	RUL	UoM	Year 2 Cost
1010	Fencing and Gates	Chain Link	5	LF	\$55.00
1010	Fencing and Gates	Chain Link	8	LF	\$32.00
1234	Grounds	Peach Trees	21	Each	\$100.00
1610	Retaining Walls	Retaining Wall Concrete	11	SE	\$0.00

- 3) Click the **Insert Line Item** button at the bottom of the screen.

The Add Line Item screen appears.

Add Line Item

Action: Add a New Line Item

Component Category: Site

Double-click to Copy a Line Item (Optional):

Line Item ID	Component	Line Item	Description
1010	Fencing and Gates	Chain Link	
1011	Fencing and Gates	Wrought Iron	
1012	Fencing and Gates	Wood	
1021	Grounds	Lawns - Fertilizers Re-Seed & Fin	
1110	Grounds	Earthwork	
1120	Grounds	Landscaping	
1130	Grounds	Trees, Trimming	
1140	Grounds	Land and Grounds: Irrigation	
1150	Grounds	Desert Landscaping	

Line Item Projection:

Quantity: 0 LF

Immediate Replace %: 0

Immediate Refurb %: 0

RUL: 0

Projection Type: Replacement

Project Cost Over 20 Years

Line Item Details:

Component: Fencing and Gates

Line Item ID: 1011

Line Item Name: Wrought Iron

Description:

Needs Type: Replacement

Unit of Measure: LF

Cost Data Source: Index

Cost Index:

Cost Index Reference:

Replacement Cost: \$57.00

Refurbish Cost: \$18.00

Local Multiplier: 1

Projection Schedule:

	Quantity	Cost
Immediate	0	\$0.00
Year 1	0	\$0.00
Year 2	0	\$0.00
Year 3	0	\$0.00
Year 4	0	\$0.00
Year 5	0	\$0.00
Year 6	0	\$0.00
Year 7	0	\$0.00
Year 8	0	\$0.00
Year 9	0	\$0.00
Year 10	0	\$0.00
Year 11	0	\$0.00
Year 12	0	\$0.00
Year 13	0	\$0.00
Year 14	0	\$0.00
Year 15	0	\$0.00
Year 16	0	\$0.00
Year 17	0	\$0.00
Year 18	0	\$0.00
Year 19	0	\$0.00
Year 20	0	\$0.00

Cancel & Close

Insert Line Item

4) Fill in the Line Item Details section on the left of the screen.

Optionally, you can double-click any of the line items listed in the table at the top-left of the screen to automatically populate data into the “**Line Item**” portion of this screen:

- **Component Category:** The project area where the item is used.
- **Component:** The list of items that are used in the project area.
- **Line Item ID:** A unique number used to locate and differentiate line items. This number is only unique to the GPNA tool.
- **Line Item Name:** The name of the component, device, material, or other.
- **Description:** A brief summary of the Line Item's purpose.
- **Unit of Measure:** Square Feet (SF), Linear Feet (LF), Quantity (#)

- 5) Enter or select the cost details in the Line Item Details section:
 - **Cost Data Source:** The origin or source for the Line Item's cost details.
 - **Cost Index:** The reference used to determine the costs of the item.
 - **Cost Index Reference:** The reference ID used in the Cost Index for the item.
 - **Replacement Cost:** The amount needed to fully replace one unit of the item.
 - **Refurbish Cost:** The amount needed to refurbish one unit of the item.
 - **Local Multiplier:** The ratio of the average cost and the cost of the item in the area of the Development/AMP location.
- 6) Enter or select the Estimated Useful Life in the Line Item Details section:
 - **EUL Data Source:** The origin or source for the Line Item's EUL details.
 - **EUL Index:** The reference used to determine the EUL.
 - **EUL Index Reference:** The reference ID used in the EUL Index for the item.
 - **Replacement EUL:** The years the item is expected to be used before it must be replaced.
 - **Refurbish EUL:** The number of years the item is expected to be useful before it must be repaired or refurbished.
- 7) Enter the projection data for the Line Item in the highlight or otherwise visually emphasize at the top right of the screen:
 - **Quantity:** The total number of units of the Line Item based on the Unit of Measure selected in the Line Item Details section.
 - **Immediate Replace %:** The percentage of the Line Item that needs to be replaced at the present time.
 - **Immediate Refurb %:** The percentage of the Line Item that needs to be repaired or refurbished at the present time.
 - **RUL:** The Remaining Useful Life of the Line Item. This field is zero for new Line Items.
 - **Projection Type:** Replacement. Sustainable needs are replacements for existing items.
- 8) Click the **Project Cost Over 20 Years** button to see the cost timeline for the need.
- 9) Click the **Insert Line Item** button to add the new Line Item to the Cost Projection Schedule.

The Cost Projection screen updates.

Add/Edit Sustainability Needs

Energy Audit data will be needed for this entry.

Building and site systems can be replaced with alternative energy saving devices to reduce costs over time. The costs and savings from green components can be viewed on the Cost Projection Schedule.

To add sustainability needs to the Cost Projection Schedule:

- 1) From the Control Panel, click the **Cost Projection** button under the Development/AMP Costs and Projections section.
- 2) When the Cost Projection screen opens, select **Sustainability Needs** from the **Filter List** drop-down menu .

ID	Component	Line Item	RUL	UoM	Year 2 Cost
1010	Fencing and Gates	Chain Link	5	LF	\$55.00
1010	Fencing and Gates	Chain Link	8	LF	\$32.00
1234	Grounds	Peach Trees	21	Each	\$100.00
1510	Retaining Walls	Retaining Wall, Concrete	11	LF	\$0.00

The Add Line Item to Projection screen appears.

Year	Quantity	Cost
Immediate	0	\$0.00
Year 1	0	\$0.00
Year 2	0	\$0.00
Year 3	0	\$0.00
Year 4	0	\$0.00
Year 5	0	\$0.00

3) Fill in the Line Item Details section on the left of the screen.

Optionally, you can double-click any of the line items listed in the table at the top-left of the screen to automatically populate data into the Line Item Details portion of this screen:

- **Component Category:** The project area where the item is used.
- **Component:** The list of items that are used in the project area.
- **Line Item ID:** A unique number used to locate and differentiate line items. This number is only unique to the GPNA tool.
- **Line Item Name:** The name of the device or upgrade.
- **Description:** A brief summary of the Line Item's purpose.
- **Unit of Measure:** Square Feet (SF), Linear Feet (LF), Quantity (#)

4) Enter or select the cost details in the Line Item Details section:

- **Cost Data Source:** The origin or source for the Line Item's cost details.
- **Cost Index:** The reference used to determine the costs of the item.
- **Cost Index Reference:** The reference ID used in the Cost Index for the item.
- **Replacement Cost:** The amount needed to fully replace one unit of the item.
- **Local Multiplier:** The ratio of the average national cost and the specific local cost of the item in the area of the Development/AMP location.

5) Enter or select the Estimated Useful Life in the Line Item Details section:

- **EUL Data Source:** The origin or source for the Line Item's EUL details.
- **EUL Index:** The reference used to determine the EUL.
- **EUL Index Reference:** The reference ID used in the EUL Index for the item.
- **Replacement EUL:** The years the item is expected to be used before it must be replaced.
- **Quantity:** The total number of units of the Line Item based on the Unit of Measure selected in the Line Item Details section.
- **Immediate Replace %:** The percentage of the Line Item that needs to be replaced at the present time.
- **RUL:** The Remaining Useful Life of the Line Item. This field is zero for new Line Items.

- 6) Green Alternative components are used to replace existing non-green components. Double-click the updated item from the table on the top-left of the screen. The following fields will populate from the selected item within the Line Item section of the screen:
 - Component
 - Line Item ID
 - Line Item
- 7) Fill in the **Sustainability Data** fields using the Energy Audit data:
 - **Sustainability Category:** The type of alternative energy product.
 - **Utility Rate:** The local price per energy unit. This depends on the Sustainability Category selected.
- 8) Enter the cost and energy data for the original item in the **Traditional Alternative** section.
- 9) Enter the cost and energy data for the new item in the **Green Alternative** section.
- 10) Click the **Calculate Payback Period** button to calculate the savings from the alternative energy investment.
 - **Payback Period:** The number of years required for the new sustainable item to repay the difference in cost of the original item.
 - **Incremental Cost:** The difference in replacement cost of the original item and the sustainable item.
- 11) Click the **Project Cost Over 20 Years** button to see the 20-year cost timeline for Sustainability Needs.
- 12) Click the **Insert Line Item** button to add the new Line Item to the Cost Projection Schedule.

The Sustainability Need appears on the Cost Projection screen.

Edit a Sustainability Need

To edit a sustainability need:

- 1) From the Cost Projection screen, select **Sustainability Needs** from the **Edit Needs Type** drop-down menu and click the **Go** button.

ID	Component	Line Item	RUL	UoM	Year 2 Cost
1010	Fencing and Gates	Chain Link	5	LF	\$55.00
1010	Fencing and Gates	Chain Link	5	LF	\$32.00
1234	Grounds	Peach Trees	21	Each	\$0.00
1610	Retaining Walls	Retaining Wall, Concrete	11	LF	\$0.00

- 2) When the Sustainability Needs screen appears, click on a line item.

The Edit Projection screen appears:

Edit Projection

The Line Item Being Edited:

- Needs Type: Sustainability
- Component Category: Unit
- Component: Bathroom
- Line Item ID: 4723
- Line Item: Water Saving Toilet

Cost Data for the above Line Item:

- Quantity: 50 Each
- Immediate Replace %: 100
- Replace Cost: \$75.00
- RUL: 5
- Projection Type: Replacement
- Replace EUL: 5

Sustainability Data

Line Item that is being Upgraded:

- Component: Bathroom
- Line Item ID: 4721
- Line Item: Toilet

Sustainability Category: Water Conserving Devices

Utility Rate: \$ 0.01 per Gal.

Traditional Alternative:	Green Alternative:
Replace Cost: \$67.00	Replace Cost: \$75.00
Replace EUL: 18	Replace EUL: 5
Usage per Year: 400 Gal.	Usage per Year: 300 Gal.

Calculate Payback Period

- Incremental Payback: 400 Years
- Incremental Cost: \$400.00
- Total Payback: 3750 Years
- Total Cost: \$3,750.00

Buttons: Cancel, Reset Projection, Delete, Save

- 3) Alter the data in the fields as necessary. When you are finished, click **Save**. If you wish to restore the data back to the original projection data based on the inspection, click **Reset Projection**.

Develop Reports

The Reports Menu is used to view, print, and export summary tables of selected Development/AMP data. The Development/AMP data include the Development/AMP Components, Line Items, GPNA, and Cost Projections

Available Reports, include:

- -GPNA Summary
- -Dev/AMP Line Item Summary
- -Dev/AMP Data
- -Dev/AMP Projection Data
- -Cost Markup

The GPNA tool allows you to print various reports. These reports include:

- 20-year accrual of physical needs per development
- Accrual of refurbishments scheduled
- Immediate needs with comments gathered from the survey
- Green alternative for Replacement Needs components
- Marketability/Livability alternatives for Replacement Needs components
- Accessibility components
- Replacement and Resources schedule
- Overall PHA-wide GPNA report
- Variance reports

Generate, Print, or Export Reports

The following reports can be generated, viewed, printed, and exported from within the GPNA tool:

GPNA Summary—The PNA Summary report consists of an overview of projected costs for the grand total of all projects for immediate costs, totals within 5 year increments, the overall total, and the total cost per unit pertaining to the currently-selected PNA from the home menu. Additionally, totals are also separated by an additional sub-report by line item component category totals.

Dev/AMP Line Item Summary—The Dev/AMP Line Item Summary report provides a summary for each line item of the selected Project such as the take-off unit, replacement cost, RUL, immediate costs, and the total.

Dev/AMP Markup Reports—The Dev/AMP Markup report allows you to use the specified project markup percentage from the cost library to be taken away from both the project projection line item summary and its overall projection data.

Dev/AMP PNA—The Dev/AMP Projection Data report provides the projected costs for a span of 20 years for each line item of the selected Project along with the Component subtotals and five year interval subtotals. This version of the Dev/AMP Projection Data combines the information from the Dev/AMP Line-item Summary, and the Dev/AMP Projection Data for a more detailed Dev/AMP data report.

Dev/AMP Variance Report—The Variance Report assists the PHA in identifying component costs and the EUL that are PHA determined (not based off an approved national building cost index service). This report is for management verification purposes at the local level. Variance Reports provide a more detailed analysis of anomalous PHA results for HUD quality control purposes.

Dev/AMP Replacement Projection—The Dev/Amp Replacement Projection report provides the user with detailed information on a currently selected project by displaying the projected costs for up to 20 years for each line item, as well as component category subtotals and 5 year range sub totals with the user specified markup percentage deducted from the final amounts for replacement needs. The Options for this report include printing, and exporting to PDF or XML functionality.

Dev/AMP Sustainability Projection—provides the user with detailed information on the currently selected project by displaying the projected costs for a span of 20 years for each line item as well as their component category subtotals and 5 year range sub totals with the user specified markup percentage deducted from the final amounts for sustainability needs. The Options for this report include open, print, exporting to PDF, and exporting to XML functionality.

Dev/AMP Marketability Projection—provides the user with detailed information on the currently selected project by displaying the projected costs for up to 20 years for

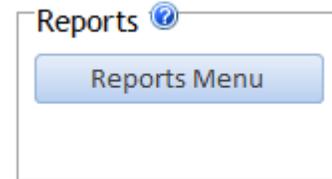
each line item as well as their component category subtotals and 5 year range sub totals with the user specified markup percentage deducted from the final amounts for marketability needs. The Options for this report include open, print, exporting to PDF, and exporting to XML functionality.

Dev/AMP Accessibility Projection—provides detailed information for a selected project by displaying the projected costs for up to 20 years for each line item as well as their component category subtotals and 5 year range sub totals with the user specified markup percentage deducted from the final amounts for accessibility needs. The Options for this report include open, print, exporting to PDF, and exporting to XML functionality.

Generating, Printing, and Exporting Reports

To generate, print, or export reports:

- 1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.
- 2) Click the **Reports Menu** button in the Reports section of the Control Panel.
- 3) When the Reporting screen appears, click the **Select a Development/AMP for Reporting** drop-down menu and select a Development/AMP from the list.



- 4) Depending upon specific needs and desired report, the following task may be performed:
 - **Open**—Click the **Open** button to open the report. If the report consists of multiple pages, use the navigation arrows at the bottom of the report screen.
 - **Print**—Click the **Print** button to print the report.
 - **Export to PDF**—Click the **Export to PDF** button to export and save the report in PDF format.
 - **Export to Excel**—Click the **Export to Excel** button to export and save the report into a Microsoft Excel file.

Conduct Quality Assurance Procedures

Quality assurance should be an integral part of every development's GPNA.

The GPNA is very valuable for future expenditure planning, as a result estimates, measurements, quantities and data entry should be confirmed in developing the GPNA process, as well as while the assessment is ongoing. Recommended Quality Assurance Protocols_QAP activities should include:

- Select 2 components per development and verify quantities a second time to assure component counts are accurate
- Select 2 components per development (a different 2 than previously) and re-check the EUL assumptions
- Select 2 components per development (a different 2 than previously) and re-check cost assumption per unit of quantity or measurement
- Select one development of those assessed and check math and calculations
- Review data from a different development (if PHA has more than 1) and review application of GPNA results to Annual Plan
- Confirm submission of GPNA results with HUD

Annual Updates

During the annual update timeframe updated data is provided to HUD using an established protocol.

You should submit your annual plan and GPNA data concurrently. Also consider using the GPNA tool for a strategic planning mechanism that allows your PHAs to keep up-to-date records of work performed on an annual basis. This annual updating process is intended to be performed as a management function without the need for additional assessment or procurement of services.

The purpose of the annual update is to provide transparency for the modernization process occurring at the local level and to compare needs and their potential funding sources.

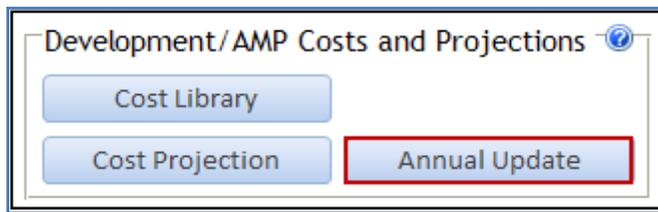
The annual update shows the replacement or refurbishment of building systems and components completed for the year and the modernization funding source. Funding sources may include Capital Funds, , operating funds, private funds, other government funds, state funds, local funds, etc.

In instances where data for partial replacements have different costs than projected, this difference will be accounted for by recording actual cost data within the GPNA tool for work performed in the annual update. Furthermore, the GPNA tool will calculate the delta between the estimated cost and actual cost, and the difference in component quantities.

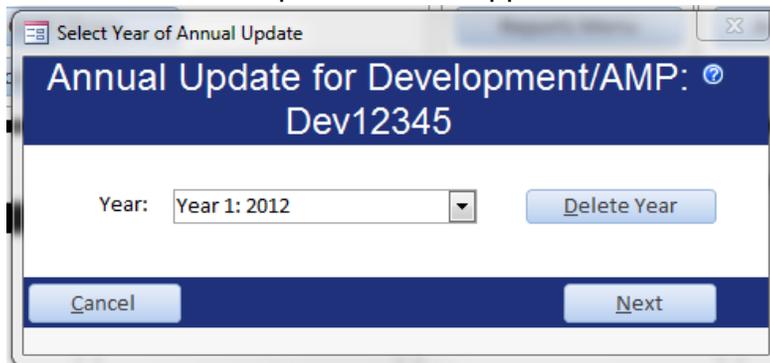
Set the Year of the Annual Update

To begin the Annual Update:

- 1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.
- 2) Select a Development/AMP from the Development/AMPs column.
- 3) Click the **Annual Update** button in the Development/AMP Costs and Projections section.



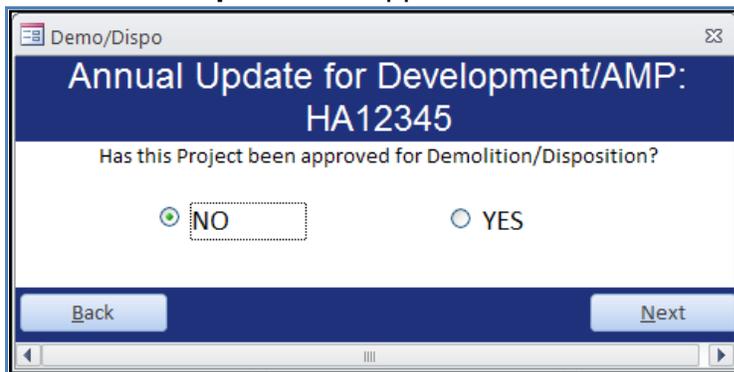
The Select Year of Annual Update screen appears



- 4) Select the **Year** from the drop-down menu.

Note: The Year drop-down menu records previous Annual Updates. You must first finalize an Annual Update before you can initiate a new Annual Update.
- 5) Click the **Next** button to continue, or click the **Delete** button to remove the selected year.

The **Demo/Dispo** screen appears



- 6) Select **No** if the Development/AMP has **not** been approved for Demolition/Disposition, and Select Next

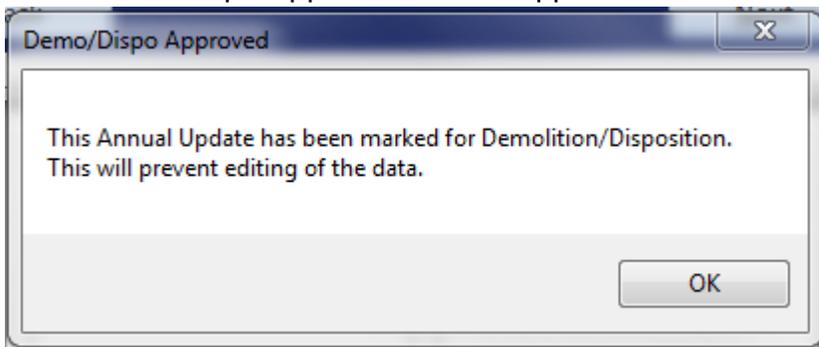
The **Annual Update** screen appears.

Needs Type	Line Item ID	Component	Line Item	Projection Type	RUL	Unit of Measure	Backlog Quantity	Backlog Cost	2012 Projected Qty	2012 Projected Cost
Sustainability	0001	Fencing and Gates	Green Item	Replace	0	LF	10	\$300.00	0	\$0.00
Marketability/Livability	002	Fencing and Gates	Marketability Item	Replace	3	LF	10	\$100.00	0	\$0.00
Accessibility	003	Fencing and Gates	Accessibility Item	Replace	4	LF	10	\$100.00	0	\$0.00
Replacement	1010	Fencing and Gates	Chain Link	Replace	5	LF	10	\$50.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Replace	4	LF	0	\$0.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Refurbish	4	LF	10	\$50.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Replace	3	LF	10	\$150.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Refurbish	3	LF	10	\$100.00	0	\$0.00
Replacement	1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2110	Foundations	Crawl Space/4 Ft Foundation	Refurbish	5	SF	120	\$240.00	0	\$0.00
Replacement	2120	Foundations	Basement/8 Ft Foundation	Refurbish	4	SF	120	\$600.00	0	\$0.00
Replacement	2130	Foundations	Slab On Grade - On Grade	Replace	3	SF	120	\$1,800.00	0	\$0.00
Replacement	2131	Foundations	Slab On Grade - Below Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2510	Fire Protection	Smoke/Fire Detection Infrastructure	Replace	5	SF	120	\$600.00	0	\$0.00
Replacement	2520	Communication Systems	Emergency Call System	Replace	4	SF	0	\$0.00	0	\$0.00
Totals:							1350	\$11,440.00	0	\$0.00

Proceed to Set the Funding Sources.

Click **Yes** if the Development/AMP has been approved for Demolition/Disposition, and select Next.

The Demo/Dispo Approved screen appears



Note: Selecting Yes will prevent you from editing the data.

Set the Funding Sources

The Annual Update Funding page allows you to add multiple funding sources to the project for the current year. Each Funding Source has an associated amount, and multiple sources can be added or deleted.

To edit Annual Update Funding:

- 1) From the Control Panel, click the **Annual Update** button in the Development/AMP Costs and Projections section and select the year of the Annual Update. Demo/Dispo screen appears first, Select “Yes” or “No”

The Annual Update screen appears.

Needs Type	Line Item ID	Component	Line Item	Projection Type	RUL	Unit of Measure	Backlog Quantity	Backlog Cost	2012 Projected Qty	2012 Projected Cost
Sustainability	0001	Fencing and Gates	Green Item	Replace	0	LF	10	\$300.00	0	\$0.00
Marketability/Livability	002	Fencing and Gates	Marketability Item	Replace	3	LF	10	\$100.00	0	\$0.00
Accessibility	003	Fencing and Gates	Accessibility Item	Replace	4	LF	10	\$100.00	0	\$0.00
Replacement	1010	Fencing and Gates	Chain Link	Replace	5	LF	10	\$50.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Replace	4	LF	0	\$0.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Refurbish	4	LF	10	\$50.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Replace	3	LF	10	\$150.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Refurbish	3	LF	10	\$100.00	0	\$0.00
Replacement	1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2110	Foundations	Crawl Space/4 Ft Foundation	Refurbish	5	SF	120	\$240.00	0	\$0.00
Replacement	2120	Foundations	Basement/8 Ft Foundation	Refurbish	4	SF	120	\$600.00	0	\$0.00
Replacement	2130	Foundations	Slab On Grade - On Grade	Replace	3	SF	120	\$1,800.00	0	\$0.00
Replacement	2131	Foundations	Slab On Grade - Below Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2510	Fire Protection	Smoke/Fire Detection Infrastructure	Replace	5	SF	120	\$600.00	0	\$0.00
Replacement	2520	Communication Systems	Emergency Call System	Replace	4	SF	0	\$0.00	0	\$0.00
Totals:							1350	\$11,440.00	0	\$0.00

- 2) Click the **Perform Action** drop-down menu located at the bottom of the screen and select **Set Funding Sources**. Click the **Go** button.

The **Edit Annual Update Funding** window appears.

Funding Source	Amount	
Capital Funds	\$0.00	Delete
Capital Funds	\$0.00	Delete
Total Funding from Sources:	\$0.00	Add Source
Total Cost of Work Completed:	\$16.00	Save & Close

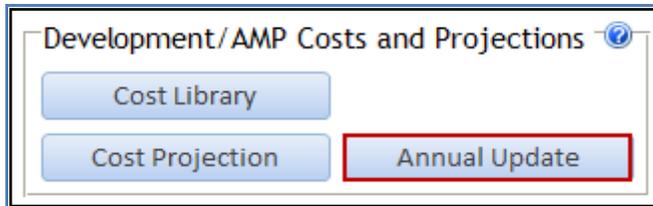
- 3) Select **Add Source** from bottom of screen, **Funding Source** fields appear in the **Funding Source** and **Amount** columns.
- 4) Click the **Funding Source** drop-down menus to change the funding source.
- 5) Enter a new value in the Amount column for the changes in funding.
- 6) Click the **Delete** button to the right of the Funding Source to remove that specific source.
- 7) Click the **Add Source** button at the bottom of the window to add a new entry to the Funding Source column.
- 8) Click the **Save & Close** button at the bottom of the window to save the changes and close the window.

Finalize the Annual Update

You must first finalize an Annual Update before you can initiate a new Annual Update.

To finalize an Annual Update:

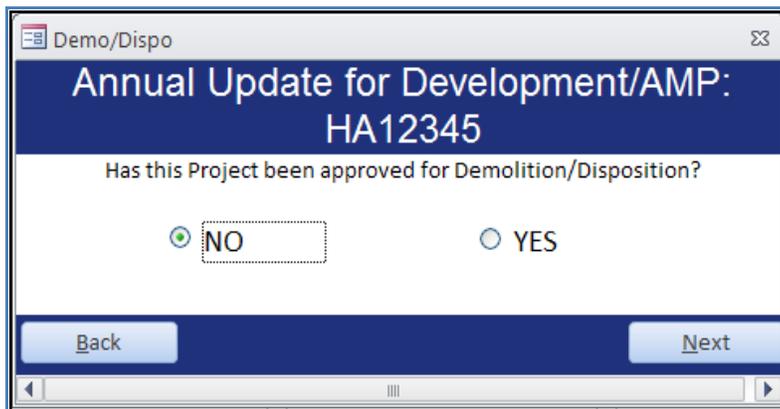
- 1) Start in the Control Panel,
- 2) Click the **Annual Update** button in the Development/AMP Costs and Projections section



- 3) Select the year of the Annual Update



- 4) Select Next to continue, the Demo/Dispo screen appears



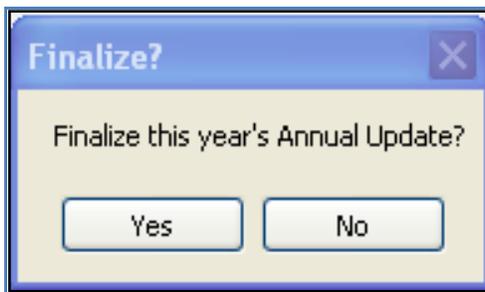
- 5) Select **No** if the Development/AMP has not been approved for Demolition/Disposition.

If you select No, continue to the Annual Update screen to edit line items

The Annual Update screen appears.

Needs Type	Line Item ID	Component	Line Item	Projection Type	RUL	Unit of Measure	Backlog Quantity	Backlog Cost	2012 Projected Qty	2012 Projected Cost
Sustainability	0001	Fencing and Gates	Green Item	Replace	0	LF	10	\$300.00	0	\$0.00
Marketability/Livability	002	Fencing and Gates	Marketability Item	Replace	3	LF	10	\$100.00	0	\$0.00
Accessibility	003	Fencing and Gates	Accessibility Item	Replace	4	LF	10	\$100.00	0	\$0.00
Replacement	1010	Fencing and Gates	Chain Link	Replace	5	LF	10	\$50.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Replace	4	LF	0	\$0.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Refurbish	4	LF	10	\$50.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Replace	3	LF	10	\$150.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Refurbish	3	LF	10	\$100.00	0	\$0.00
Replacement	1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2110	Foundations	Crawl Space/4 Ft Foundation	Refurbish	5	SF	120	\$240.00	0	\$0.00
Replacement	2120	Foundations	Basement/8 Ft Foundation	Refurbish	4	SF	120	\$600.00	0	\$0.00
Replacement	2130	Foundations	Slab On Grade - On Grade	Replace	3	SF	120	\$1,800.00	0	\$0.00
Replacement	2131	Foundations	Slab On Grade - Below Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2510	Fire Protection	Smoke/Fire Detection Infrastructure	Replace	5	SF	120	\$600.00	0	\$0.00
Replacement	2520	Communication Systems	Emergency Call System	Replace	4	SF	0	\$0.00	0	\$0.00
Totals:							1350	\$11,440.00	0	\$0.00

- 6) Make the necessary changes and edits to the Annual Update report, including setting the Funding Sources.
- 7) Click the **Perform Action** drop-down menu located at the bottom of the screen and select **Finalize Annual Update**. Click the **Go** button.
- 8) When the **Finalize** window appears, click the **Yes** button to save all changes and altered data to the Development/AMP.



Submit Data to HUD Central Database

Navigate to the Reports Menu from the Control Panel to access all PNA and Development/AMP Reports

The Reports Menu allows you to open, print, and export all reports to PDF and XML.

The Export XML button within the report menu produces a file to be emailed to the specified HUD email address as an attachment. This is the housing authority's GPNA data submission.

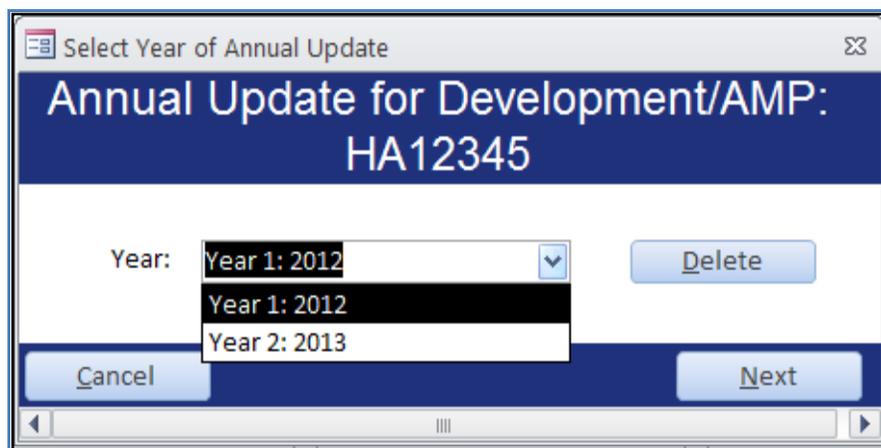
Note: Housing Authorities must export and email the XML file for every Development/AMP in their portfolio..

Export Aggregates to XML

To export aggregates to XML:

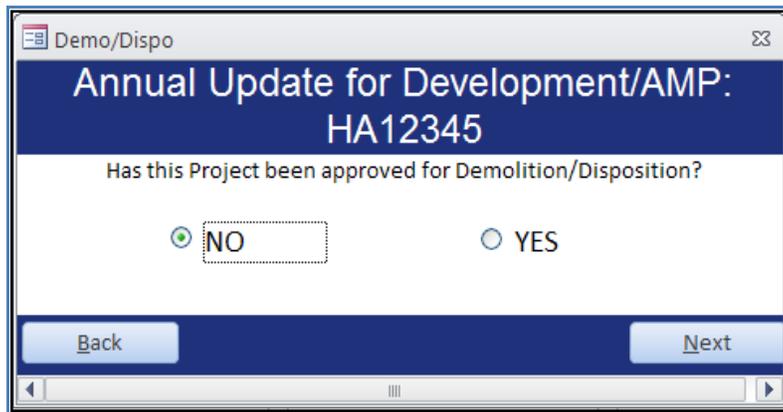
- 1) From the Control Panel, click the **Select a Physical Needs Assessment** drop-down menu and select the appropriate GPNA from the list.
- 2) Select a Development/AMP from the Development/AMPs column.
- 3) Click the **Annual Update** button in the Development/AMP Costs and Projections section.

The Select Year of Annual Update screen appears.



- 2) Select the **Year** from the drop-down menu.
- 3) Click the **Next** button to continue, or click the **Delete** button to remove the selected year.

The Demolition/Disposition screen appears.



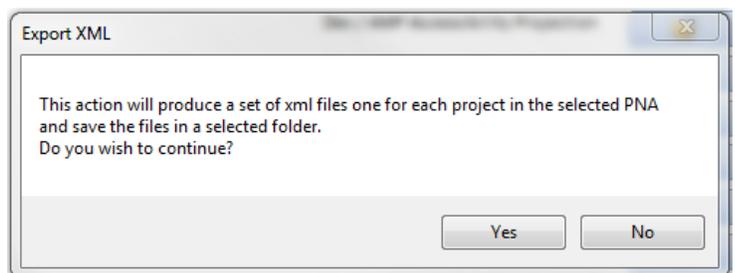
- 4) Select **No** if the Development/AMP has not been approved for Demolition/Disposition.
- 5) If you clicked **No**, the Annual Update screen appears for the selected Development/AMP. Click on the Question mark buttons for further information about each specific column on the screen

Needs Type	Line Item ID	Component	Line Item	Projection Type	RUL	Unit of Measure	Backlog Quantity	Backlog Cost	2012 Projected Qty	2012 Projected Cost
Sustainability	0001	Fencing and Gates	Green Item	Replace	0	LF	10	\$300.00	0	\$0.00
Marketability/Livability	002	Fencing and Gates	Marketability Item	Replace	3	LF	10	\$100.00	0	\$0.00
Accessibility	003	Fencing and Gates	Accessibility Item	Replace	4	LF	10	\$100.00	0	\$0.00
Replacement	1010	Fencing and Gates	Chain Link	Replace	5	LF	10	\$50.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Replace	4	LF	0	\$0.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Refurbish	4	LF	10	\$50.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Replace	3	LF	10	\$150.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Refurbish	3	LF	10	\$100.00	0	\$0.00
Replacement	1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2110	Foundations	Crawl Space/4 Ft Foundation	Refurbish	5	SF	120	\$240.00	0	\$0.00
Replacement	2120	Foundations	Basement/8 Ft Foundation	Refurbish	4	SF	120	\$600.00	0	\$0.00
Replacement	2130	Foundations	Slab On Grade - On Grade	Replace	3	SF	120	\$1,800.00	0	\$0.00
Replacement	2131	Foundations	Slab On Grade - Below Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2510	Fire Protection	Smoke/Fire Detection Infrastructure	Replace	5	SF	120	\$600.00	0	\$0.00
Replacement	2520	Communication Systems	Emergency Call System	Replace	4	SF	0	\$0.00	0	\$0.00
Totals:							1350	\$11,440.00	0	\$0.00

- 6) Make the necessary changes and edits to the Annual Update report, including setting the Funding Sources.
- 7) Click the **Export All Aggregates to XML button**.

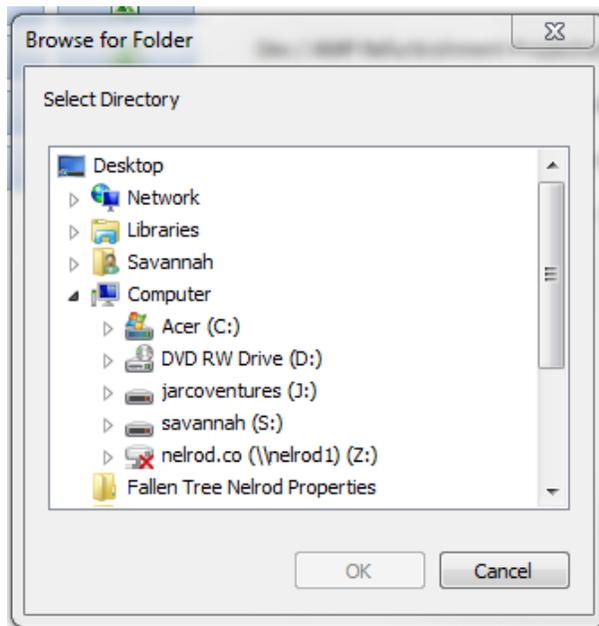
The Export XML screen appears
Select Yes to continue,

If you Select No, you will be automatically redirected to the Reports Menu.

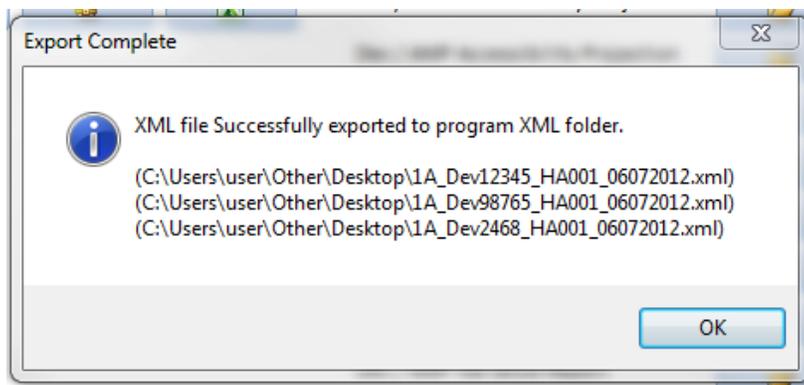


The Browse for Folder screen appears

- 8) To save the XML export file, Identify or create a local location on your PC



When the export completes, the following pop-up appears notifying you of the completion of the export and where you can find the file on your PC:



Export Revision to XML

To export the Annual Update revision to XML:

- 1) From the Control Panel, click the **Annual Update** button in the Development/AMP Costs and Projections section and select the year of the Annual Update.

The Annual Update screen appears.

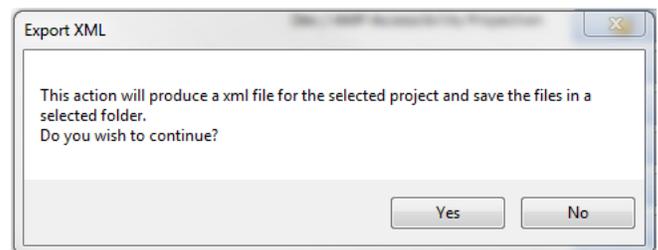
Needs Type	Line Item ID	Component	Line Item	Projection Type	RUL	Unit of Measure	Backlog Quantity	Backlog Cost	2012 Projected Qty	2012 Projected Cost
Sustainability	0001	Fencing and Gates	Green Item	Replace	0	SF	10	\$300.00	0	\$0.00
Marketability/Livability	002	Fencing and Gates	Marketability Item	Replace	3	LF	10	\$100.00	0	\$0.00
Accessibility	003	Fencing and Gates	Accessibility Item	Replace	4	LF	10	\$100.00	0	\$0.00
Replacement	1010	Fencing and Gates	Chain Link	Replace	5	LF	10	\$50.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Replace	4	LF	0	\$0.00	0	\$0.00
Replacement	1011	Fencing and Gates	Wrought Iron	Refurbish	4	LF	10	\$50.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Replace	3	LF	10	\$150.00	0	\$0.00
Replacement	1012	Fencing and Gates	Wood	Refurbish	3	LF	10	\$100.00	0	\$0.00
Replacement	1021	Grounds	Lawns - Fertilizers Re-Seed & Fine Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2110	Foundations	Crawl Space/4 Ft Foundation	Refurbish	5	SF	120	\$240.00	0	\$0.00
Replacement	2120	Foundations	Basement/8 Ft Foundation	Refurbish	4	SF	120	\$600.00	0	\$0.00
Replacement	2130	Foundations	Slab On Grade - On Grade	Replace	3	SF	120	\$1,800.00	0	\$0.00
Replacement	2131	Foundations	Slab On Grade - Below Grade	Replace	2	SF	0	\$0.00	0	\$0.00
Replacement	2510	Fire Protection	Smoke/Fire Detection Infrastructure	Replace	5	SF	120	\$600.00	0	\$0.00
Replacement	2520	Communication Systems	Emergency Call System	Replace	4	SF	0	\$0.00	0	\$0.00
Totals:							1350	\$11,440.00	0	\$0.00

- 2) Make the necessary changes and edits to the Annual Update report, including setting the Funding Sources.
- 3) Click the **Export Revision to XML** button.

Export XML window appears.

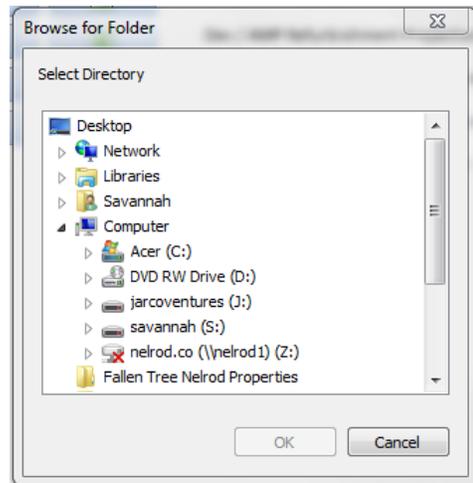
Select **NO** to cancel the export and return to the Reports Menu.

Select **Yes** to confirm you wish to export to XML.

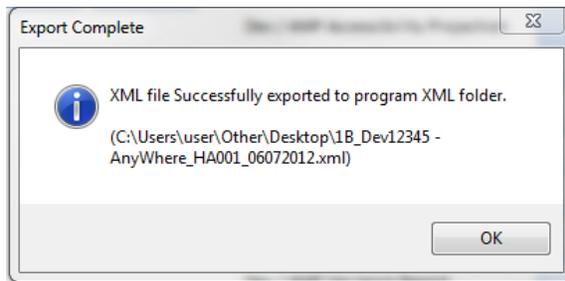


The Browse for Folder screen appears

- 4) Identify or create a local folder within the **Browse for Folder** screen and select **OK** to continue



- 5) Once the export is complete the following pop-up will notify you of the file location on your PC.



Appendix

Definitions

Accessibility Needs Component— Refers to capital improvements which are non-existing and deemed necessary to establish or add functional accessibility. Existing accessibility components are recorded within the Replacement Needs Component.

Building/Site Components—A compilation of building and site items identified using CFFP, Green PCA, and other building-industry components. The list is divided into the following categories; site, building systems, building exteriors, units and common areas.

Components—There are four components that make up a complete GPNA and contribute to an accurate aggregated capital needs number. These include: Replacement needs, Accessibility needs, Marketability /livability needs and Sustainability needs.

Component Unit Cost—Based on industry developed cost indices. PHAs will select a standard, nationally recognized cost index; such as R.S. Means³ or Marshall & Swift. There is no perceptible advantage to utilizing multiple cost indices.

Cost Library—Serves as the repository of costing and EUL data for the GPNA.

Estimated Useful Life (EUL) —Refers to the length of time (in years) for which a building system or component is expected to remain functioning. EUL values are recorded as a part of the GPNA cost and EUL component libraries in the GPNA tool

Local Multiplier—

Conversion factor identified to aid in the conversion of average national cost values based on National Indices to local price estimates – to allow for more accurate cost projections.

Marketability/Livability Needs Components—Refers to capital improvements, which add new functionality not previously present, or those improvement which promote occupancy by retaining current and attracting new tenants.

Refurbishment—A comprehensive repair activity of a building system or component that is beyond the normal scope of general maintenance, and extends the estimated useful life of the building system or component. Extension of the estimated

useful life of refurbished building systems or components must be at least 50% of the replacement's estimated useful life.

Replacement Needs Components Refers to capital improvements made to standard building/site building systems components and serves as baseline of component conditions of all basic building systems.

Soft Costs— (Overhead, general conditions, profit) should be included by the PHA in their submitted costs. Soft costs are included in estimates provided by industry specialists (e.g., R.S. Means). For most cost indices, estimations include materials, labor, equipment, general conditions, overhead, and profit. Other soft costs such as A&E, inflation administrative fees, and expenses for relocation should not be included in a PHA's estimations in its GPNA.

Sustainability Needs Components— Serves as a data receptacle of energy audit information within the GPNA. As such, the sustainability needs component data will be coordinated with the data from an energy audit that should be conducted in conjunction with the GPNA.

Substandard—Condition rating denoting components which no longer meet local building code standards, affordable housing marketplace standard, or less than total development cost (TDC) quality.

Sample RFP Scope for 3rd Party Assessor

Sample Request for Proposals

Physical Needs Assessments

Invitation

The Housing Authority of _____ with its primary address at _____ is seeking the services of a consulting firm to provide services in (either) 1- developing an initial Green Physical Needs Assessment (GPNA) of the _____'s housing stock; or 2- update an existing GPNA using the Department of Housing and Urban Development's (HUD) required criteria, per PIH # _____.

Description of Agency

The _____ Agency is a public body organized under the laws of the State/Commonwealth of _____. The Agency consists of _____ public housing units, _____ Housing Choice Vouchers, _____ site based Housing Choice vouchers, and _____ units of affordable housing.

The agency has _____ number of developments that will be part of this assessment.

Bidder Qualifications

Five years of experience with inspections of building systems including systems, roofs, structural components, living spaces, plumbing, electrical, HVAC, building envelope, emergency systems, elevators, community and program spaces, offices, and grounds and other amenities.

Demonstrated track record of other contracts or similar services

Experience with cost estimating

Knowledge of applicable local and state building codes and ordinances

Knowledge of Section 504 and American with Disabilities Act

Scope of Services

The purpose of this solicitation is to select a qualified firm to perform a green physical needs assessment (GPNA). The GPNA will consist of a physical inspection of all ___#___ identified properties. The selected contractor will provide a full range of services including evaluating the existing conditions of the housing stock including a random selection of units, common areas, offices, and program areas.

All identified physical improvements will meet or exceed the HUD mandatory standards, and those established by local health, safety, and building codes.

At a minimum, the goal of the GPNA is to identify and provide a description of all physical improvements that will be required to bring the property back to a level comparable with “as built”, to the degree reasonably possible based on available components and building age. The effort should provide the Agency with the information necessary to ensure long term physical viability and in a manner suitable for planning and budgeting purposes. Data shall be in a format suitable for HUD reporting requirements.

Specific scope components:

- 1) Follow the requirements and guidelines established by HUD in PIH #_____ which describes the required approach to GPNAs.
- 2) Perform interviews as needed with knowledgeable people as to the existing documents, plans, building histories, maintenance records, REAC scores, etc. of each property.
- 3) Identify all development components that will be part of the assessment.
- 4) Establish a sampling methodology for units that will include 10% of all units per property. The sample should also include at least 1 of each apartment size in each building type. Units must be distributed so that a variety of conditions will be evaluated (top floor units, corner units, areas where weathering occurs, etc.). Section 504 units will be included so that they are also represented equitably in the sampling methodology including locations and bedroom sizes.
- 5) Establish a methodology that will sample common lobby areas and corridors.
- 6) Establish a plan to inspect 100% of site, all systems, paving and grading, building exteriors/envelope, finishes, program areas, offices, basements, utilities, laundry facilities, mechanical areas, sprinklers, emergency systems, security, crawl spaces, etc. Please note if individual units have individual HVAC, basements, etc, then these will be part of the 10% sample, except in cases where there may be atypical components which should be assessed individually.
- 7) As part of the assessment, each individual component will receive an estimate of Expected Useful Life (EUL).
- 8) As part of the assessment, each individual component will be provided with a replacement cost on an individual component and for a total of those components. (Ex: per window and per window times all similar windows)
- 9) Each area that is designated as part of Section 504 or American with Disabilities Act (ADA) requirements will be inspected to assure the components are functioning per their purpose. Note a regulatory compliance review is not required for these units or areas, just a functionality and EUL assessment.

- 10) Upon completion of the inspections, a report will be provided to the Agency in narrative and spreadsheet forms that meets HUD and Agency requirements and will be in both paper and electronic format per their (HUD) requirements.
- 11) The assessment is of observable components and destructive testing is not anticipated and would only occur with prior Agency approval.
- 12) Any deficiencies that are identified and which could have an impact on health and safety will be brought to the attention of the Agency immediately.

Description of Agency Housing Stock

The housing stock to be assessed consists of:

Development 1 _____

Address _____

Total Units _____ Building type(s)(per HUD PIC)

Unit mix 0 bedroom ___ 1-bedroom ___ 2-bedroom ___ 4-bedroom ___

5-bedroom ___ 6-bedroom _____

Development acreage _____ Parking spaces _____

Play areas _____

Offices, community buildings, storage buildings

Development 2 _____

Address _____

Total Units _____ Building type(s)(per HUD PIC)

Unit mix 0 bedroom ___ 1-bedroom ___ 2-bedroom ___ 4-bedroom ___

5-bedroom ___ 6-bedroom _____

Development acreage _____ Parking spaces _____ Play areas _____

Offices, community buildings, storage buildings _____