



Welcome to the 2020-21 Facilities Performance Indicators (FPI) Survey.

If you have any questions while completing this survey, please contact Christina Hills at christina@appa.org

Registration Module

Completion of this module and every question highlighted in **ORANGE throughout this survey is required in order to be considered a participant in this survey.** Once this Registration module is complete, the rest of the survey modules will be available to access.

1. **Auxiliary Designation:**

Please select whether you will INCLUDE or EXCLUDE auxiliary services throughout this entire survey. You will need to choose one option and ensure every survey response field is consistent with your designation. If you decide to change your auxiliary designation, you will need to adjust every survey response field as well.

- include auxiliary services
- exclude auxiliary services

Definition:

An auxiliary service is an entity that exists to furnish goods or services primarily to students, faculty, or staff, and that charges a fee directly related to, although not necessarily equal to, the cost of the goods or services. The distinguishing characteristic of auxiliary services is that they are managed as essentially self-supporting activities. Examples are: residence halls, food services, college stores, student health centers, golf courses, parking, and laundry.

FAQ:

Question: If I indicate that my entries *exclude* auxiliaries, can I include auxiliary figures in some answers?

Answer: You must universally include or exclude auxiliary amounts in your entries. Switching between auxiliary and non-auxiliary would mislead those who use the FPI report and possibly invalidate some of your calculated measures.

2. Select all the individual auxiliary areas you will report out on in this survey. Providing this information will help others who also elect to include auxiliary services better understand which type of auxiliaries their peers may be reporting out on etc.

Residence Halls/Dorms

Dining/Food Services

Athletics

Parking

College Stores

Student Health Centers

Security/Public Safety

Transportation/Fleet Services

Other

Other

Other

3. Is your institution located in Canada?:

- Yes
- No

4. Indicate whether your survey entries will be submitted in US Dollars or Canadian Dollars (modify from default option if necessary):

- US Dollars
- Canadian Dollars

5. Indicate whether your survey entries will be submitted in GSF or GSM (Gross Square Feet or Gross Square Meters) (modify from default option if necessary):

- GSF
- GSM

6. Indicate whether your survey entries will be submitted in CSF or CSM (Custodial Square Feet or Custodial Square Meters) (modify from default option if necessary):

- CSF
- CSM

7. Indicate whether your Grounds' survey entries will be submitted in Acres or Hectares (modify from default option if necessary):

- Acres
- Hectares

8. **Permissions:**

I give my permission to APPA to identify my institution's name to all FPI survey participants who also agree to share their institution's name in the published report:

Participants willing to share their identity will have their institution's name included in the participant version of the APPA FPI reports. For example, the function of selecting any two institutions and comparing their statistics is made more meaningful when the institution's name is known. Conversely, all institutions that select NO will only be able to view alphanumeric codes for all participants in the published FPI report. You will only know your institution's alphanumeric code.

- Yes
- No

9. **Contact Information:**

Please provide the contact information for all data scrubbing related inquiries. This individual and their contact information will also be made available to all FPI participants who elect to share their identity with other participants. Sharing this contact list is important if you wish to receive clarification from any of your peer institutions' submitted data for example.

This contact information will NOT be distributed to anyone who selected "NO" in the previous question.

First and Last Name:

Email Address:

Phone Number:

Module 1: About the Facilities Unit Questions

About the Facilities Unit

The purpose of this section is to capture the cohort information for FPI Report summaries and basic campus statistics. APPA has automated most of this section by automatically populating some cohort information directly from the Integrated Postsecondary Education Data System (IPEDS) such as institutional funding (public or private), Carnegie classification, and APPA region.

1.1. **Select your student enrollment range for 2020-2021:**

Definition:

Enrollment ranges are defined by APPA for use in the FPI report and are based on the institution's reported student FTE in the Enrollment Questions survey section below.

FAQ:

Question: What is the difference between enrollment range and student FTE?

Answer: Suppose a campus has an enrollment of 1,540 FTE students. This is the number you would enter in the Student Official FTE data field. Their Enrollment Range is 1,000 - 1,999. We use the range to group schools together into like enrollment ranges for developing enrollment statistics and summary selection options for the FPI Report. The more narrow ranges in the lower enrollments could show that a small increase in enrollment equals a large percent of change for some campuses. In other words, an increase of 1,000 students affects a campus with a base enrollment of 2,000 quite differently than a campus with a base enrollment of 20,000.

0 - 999

1,000 - 1,999

2,000 - 2,999

3,000 - 4,999

5,000 - 11,999

12,000 - 19,999

20,000+

1.2. **Enter your Fall 2020 student enrollment as a number:**

Definition:

Use the number that your institution reports as its official Fall 2020 FTE enrollment. Normally, this is the enrollment as of a certain date in the Fall of 2020.

FAQ:

Question: Should our enrollment numbers include our students in the Distance Learning Program? Or resident students only?

Answer: You should contact the Registrar and get the official campus enrollment numbers. The distance learning students may or may not be included depending on the campus. If they are considered part of the Extension program, they are not included in the enrollment number.

If they are considered part of the normal academic departments for credits, then they should be included in the enrollment number.

1.3.

Facilities Staffing Questions

Total in-house facilities FTE:

Definition:

Total number of regular staff, full-time equivalent (FTE) employees, caring for the total GSF/GSM and grounds/hectares maintained by the facilities department. Include the FTE performing all functions covered by this survey (Administration, Renovation/Construction/A&E, Custodial Services, Grounds/Landscaping, Energy/Utilities, Maintenance, and Other facilities functions). In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

FAQ:

Question: We use a large amount of student labor in custodial services equal to 10 FTE. Should these students be counted as part of the In-house staff FTE?

Answer: Yes, you will want to include student labor in your FTE count and expenditures. Be sure to distinguish between students supporting auxiliaries and those that do not. If you are excluding auxiliaries in your survey, you do not want to include those students who work for auxiliaries on campus for example.

TIP: 1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

Total student FTEs *included above*:

Definition:

Total number of student FTEs included in the number of regular staff, full-time equivalent (FTE) employees, caring for the total GSF/GSM and grounds/hectares maintained by the facilities department. Include the FTE performing all functions covered by this survey (Administration, Renovation/Construction/A&E, Custodial Services, Grounds/Landscaping, Energy/Utilities, Maintenance, and Other facilities functions). In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

FAQ:

Question: We use a large amount of student labor in custodial services equal to 10 FTE. Should these students be counted as part of the In-house staff FTE?

Answer: Yes, you will want to include student labor in your FTE count and expenditures. Be sure to distinguish between students supporting auxiliaries and those that do not. If you are excluding auxiliaries in your survey, you do not want to include those students who work for auxiliaries on campus for example.

TIP: 1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

1.4. **Work Week Hours:**

Definition:

Enter your standard work week hours if less than 40 hours per week. This information is used to normalize all hour responses to the same standard for comparison purposes in the report.

Standard work week hours (modify if necessary):

40

1.5. About the Facilities Unit comments and notes for future reference:

Module 2: What Facilities Make Up Our Institution Questions

What Facilities Make Up Our Institution?

- The purpose of this survey section is to identify a small set of statistics that describe your campus' physical assets. There are two very important entries in this section: GSF/GSM Maintained and CRV (Current Replacement Value). Both of these data points are used in the calculation of many FPI measurements, with CRV being the most critical of the strategic measurements.
- All FPI survey participants are encouraged to use the CRV Calculation Worksheet because it assists in the development of a sound CRV estimate. It also provides an audit trail for data scrubbing, and it provides drill-down information on campus GSF/GSM and construction costs.
- Please note that the CRV estimate should be based on GSF/GSM Maintained. This means that your CRV calculation may not encompass the entire GSF/GSM footprint of the campus or institution. You will need to keep this in mind when viewing your ratios and measures in the FPI Report.
- Please note that if you've excluded auxiliaries, they need to be excluded from all GSF/GSM and CRV numbers.

2.1. Building GSF/GSM Questions

1. Total GSF/GSM maintained by facilities:

Definition:

Campus building GSF/GSM (including rental/leased space) that is maintained by the institution's facilities department. GSF/GSM is defined as the sum of all areas on all floors of a building included within the outside faces of its exterior walls, including all vertical penetration areas, for circulation and shaft areas that connect one floor to another. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

FAQ:

Question: We have a large building on campus that is shared by the university, a church, and a Christian academy. How should I report the GSF/GSM for this building? Answer: The response to this should be based on the business arrangement with the church and Christian academy. Then there are some questions that need to be answered: Do the organizations use all of the building or just a part of it? If part of the building is used by the church or the academy, does either organization have exclusive use of the space assigned to them, or if not, do these organizations pay a fee for their use of the space? How does that fee compare with the institution's overall cost per GSF/GSM for facilities functions? Compute approximate cost per GSF/GSM by dividing facilities annual expenditures by GSF/GSM maintained to determine overall cost per GSF/GSM. At one extreme, if the organizations have exclusive use of a given number of GSF/GSM and pay all costs of maintaining this GSF/GSM - then this GSF/GSM number (in its entirety) is excluded from the total GSF/GSM maintained reported here. At the other extreme, if the organizations have non-exclusive use of the space and only pay for a portion of the costs of maintenance - this GSF/GSM number (a percent or ratio of the total GSF/GSM for the building) needs to be excluded from the total GSF/GSM maintained reported here. The percent or ratio of the total GSF/GSM to exclude will be based on either what percent of the total maintenance cost they pay or what percent of the total GSF/GSM they use with regard to this particular building.

Question: In reviewing our numbers, sometimes we include the parking garages in our GSF/GSM for our utilities and maintenance and sometimes we do not. It really depends on what everyone else submits.

The parking garages make up over 1 million GSF/GSM on campus, but have minimal utilities and/or maintenance. Is this something that should be included in our GSF/GSM entries? Answer: This decision will depend on a couple of factors. First, are the parking garages generating revenue by charging fees to students, staff, etc.? If so, then these garages are considered auxiliary services and should be included IF you elected to include auxiliary services in the Registration module of the survey. If you elected NOT to include auxiliary services, then you would leave these garages out of the survey entirely in ALL GSF/GSM entries.

2. Total campus building GSF/GSM OWNED and RENTED, and used by the institution:

Definition:

Rental space is now reported along with owned space in the survey. Rental space consists of buildings not owned outright by the institution. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

FAQ:

Question: What is the purpose for including rented facilities in the total campus building area that we do not maintain? Answer: The rented GSF/GSM is included to show the magnitude of the campus. It is important for APPA to have these gross figures to answer general questions about the entire campus footprint. The GSF/GSM Maintained entry field above under Question 1 covers the facilities' responsibilities only.

3. How much of the total campus building GSF/GSM above is RENTED or LEASED?:

Definition:

Include all building space used but not owned outright by the institution. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

2.2. **Number of OWNED buildings:**

Definition:

Exclude rented buildings. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

2.3. Building adjusted average age (weighted average in years) of OWNED buildings:

[Link to video](#) explaining how to calculate weighted average.

[Adjusted average age \(weighted average\) worksheet template](#)

Definition:

The average age of buildings adjusted for the impact of recapitalization. Please use an appropriate adjusted age (also called a weighted average) for any capital rehabilitation projects that have the inherent result of extending the useful life of the building. Building adjusted average age (weighted average in years) of OWNED buildings. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

2.4. Grounds/Landscaping Questions

1. Total Acres/Hectares maintained by facilities department:

Definition:

The part of total campus acreage/hectares that are *routinely* maintained. Farm land and forests are excluded. Acreage/Hectares mowed once or twice per year for fire protection is excluded. This is the acreage/hectares used as the basis for staffing the landscaping/grounds function. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

2. Total number of Acres/Hectares used by the institution (although not necessarily maintained by facilities):

Definition:

Include acreage/hectares that are undeveloped. Exclude land held as an investment for future sale. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

FAQ: Question: If facilities does not maintain all of the campus acres/hectares, should I report only those acres/hectares maintained? Answer: No, report total acres/hectares, whether or not they are maintained by facilities.

TIP: Do NOT remove your buildings' footprint from this number. The total acres/hectares number can be found on your institution's website.

2.5. Net Assignable Square Feet (NASF) Questions:

PDF version of space use category definitions and associated FICM codes: [NASF / FICM Definitions](#)

Definition of Net Assignable Square Footage (NASF):

The sum of all areas on all floors of a building assigned to, or available for assignment to, an occupant or specific use. **Basis for Measurement.** Net Assignable Area is computed by physically measuring or scaling measurements from the inside faces of surfaces that form the boundaries of the designated areas. Exclude areas having less than a 3-foot clear ceiling height unless the criteria of a separate structure are met. (See [section 2.3](#), What to Include in a Building Inventory.)

Measured in terms of Net Assignable Square Feet (NASF),

NASF = Sum of Areas Designated by the 10 Assignable Major Space Use Categories

Description. Included should be space subdivisions of the 10 major space use categories for assignable space—classrooms, labs, offices, study facilities, special use, general use, support, health care, residential, and unclassified—that are used to accomplish the institution's mission.

Limitations. Deductions should not be made for necessary building columns and projections. These small areas are excluded as they represent an insignificant percentage of the total area of an average-sized space. Capturing their area would be unduly burdensome relative to the very small contribution they would make toward precision. Areas defined as building service, circulation, mechanical, and structural should not be included.

Institutions should use the [FICM Space Use Categories](#) definitions contained in the online Postsecondary Education Facilities Inventory and Classification Manual (FICM). A PDF version of the manual can also be viewed or downloaded by clicking [FICM Code Standard Manual \(PDF Version\)](#). [Include auxiliary services in each NASF category.](#)

The FICM Space Use Categories link is a live web link in the survey.

FAQ:

Question: Let's say I am looking at a building primarily used for classrooms, but this building may contain rooms for other purposes such as study or office space. Should I break the building up to the percentages for each or list that building as 100% classroom space?

Answer: The preferred method is to divide the NASF into the different uses of space. If you choose to do this, do not spend time trying to calculate the exact division of space. The NASF for now, is used to describe a campus' mix of space so that another campus can look for a comparison cohort and can determine if the types of space that affect the costs of operation are in the same approximate distribution as for their campus. For example, lab space is expensive to maintain and to clean, so a campus with a greater percentage of lab space will look for another campus that also has a higher percentage of lab space.

TIP:

The NASF by room use categories can also be requested from the campus office that maintains a space inventory.

1. Classrooms NASF/FICM 100 Series:

Definition:

Classrooms NASF includes space used for general purpose classrooms, lecture halls, recitation rooms, seminar rooms, and other spaces used primarily for scheduled non-laboratory instruction. Room Use codes in the FICM 100 series.

2. Laboratory Facilities NASF/FICM 200 Series:

Definition:

Laboratory Facilities NASF includes rooms or spaces characterized by special purpose equipment or a specific configuration that ties instructional or research activities to a particular discipline or a closely related group of disciplines. Room Use codes in the FICM 200 series.

3. Office Facilities NASF/FICM 300 Series:

Definition:

Office Facilities NASF includes offices and conference rooms specifically assigned to each of the various academic, administrative, and service functions. Room Use codes in the FICM 300 series.

4. Study Facilities NASF/FICM 400 Series:

Definition:

Study Facilities NASF includes study rooms, stacks, open-stack reading rooms, and library processing spaces. Room Use codes in the FICM 400 series.

5. Special Use Facilities NASF/FICM 500 Series:

Definition:

Special Use Facilities NASF includes military training rooms, athletic and physical education spaces, media production rooms, clinics, demonstration areas, field buildings, animal quarters, greenhouses, and other room categories that are sufficiently specialized in their primary activity or function to merit a unique room code. Room Use codes in the FICM 500 series.

6. General Use Facilities NASF/FICM 600 Series:

Definition:

General Use Facilities NASF includes assembly rooms, exhibition space, food facilities, lounges, merchandising facilities, recreational facilities, meeting rooms, child and adult care rooms, and other facilities that are characterized by a broader availability to faculty, students, staff, or the public than are special use areas. Room Use codes in the FICM 600 series.

7. Support Facilities NASF/FICM 700 Series:

Definition:

Support Facilities NASF includes computing facilities, shops, central storage areas, vehicle storage areas, and central service space that provide centralized support for the activities of a campus. Room Use codes in the FICM 700 series.

8. Healthcare Facilities NASF/FICM 800 Series:

Definition:

Healthcare Facilities NASF includes facilities used to provide patient care (human and animal). Room Use codes in the FICM 800 series.

9. Residential Facilities NASF/FICM 900 Series:

Definition:

Residential Facilities NASF includes housing facilities for students, faculty, staff, and visitors to the campus. Room Use codes in the FICM 900 series.

10. Unclassified Facilities NASF/FICM 000 Series:

Definition:

Unclassified Facilities NASF includes inactive or unfinished areas, or areas in the process of conversion. Room Use codes in the FICM 000 series.

11. Non-Assignable Square Feet/FICM WWW, XXX, YYY Series:

Definition:

Non-assignable SF includes circulation (non-assignable spaces required for physical access to floors or subdivisions of space within the building, whether directly bounded by partitions or not), building service (non-assignable spaces used to support its cleaning and public hygiene functions), and mechanical areas (non-assignable spaces of a building designed to house mechanical equipment and utility services, and shaft areas). Room use codes in the FICM WWW, XXX, and YYY series. *Non-assignable Area = Sum of the Areas designated as the three non-assignable Space Use Categories (circulation, building service, and mechanical areas).*

12. Structural Square Feet/FICM ZZZ Series:

Definition:

Structural SF includes the sum of all areas on all floors of a building that cannot be occupied or put to use because of structural building features. Examples of building features normally classified as structural areas include exterior walls, fire walls, permanent partitions, unusable areas in attics or basements, or comparable portions of a building with ceiling height restrictions, as well as unexcavated basement areas. Structural area equals the gross area less the net usable area. Room use codes in the FICM ZZZ series.

Total

2.6 What Facilities Make Up Our Institution comments and notes for future reference:

Current Replacement Value (CRV) Calculation Worksheet

The CRV Calculation Worksheet provides the structure for calculating current replacement value by main space categories. When the entries in this worksheet are saved, your calculated CRV will be automatically populated into survey Module 3: *Is my institution adequately funding the facilities management annual budget?* You may change entries in this worksheet and resubmit your new CRV calculation if you find you have made errors in some of the data fields below.

Infrastructure must be entered as EITHER a dollar amount OR a percent of total CRV. You are not able to enter data in both fields and one of the two fields must be blank (no zeros) in order to input a value in the other field. If you choose to enter infrastructure as a percent of CRV, you must enter the desired percent as a decimal (e.g. .30 NOT 30%). APPA recommends using .25 in the absence of a dollar amount or known percentage.

CRV (Current Replacement Value) is the total amount of expenditure (in current dollars) required to replace the institution's facilities to its PRESENT condition. This includes the full replacement cost for all buildings, grounds, utility systems, and generating plants. Insurance replacement values or book values should not be used to determine current replacement value.

IMPORTANT:

- Confirm that the total GSF/GSM (Gross Square Feet/Gross Square Meters) entered into this worksheet is consistent with the total campus GSF/GSM Maintained in Module 2 What Facilities Make Up Our Institution?
- If your only source of square footage by type of building is NASF (Net Assignable Square Footage), apply a factor to convert the NASF to GSF/GSM for your entries in the worksheet.
- Please note that the CRV estimate should be based on GSF/GSM Maintained. This means that your CRV calculation may not encompass the entire GSF/GSM footprint of the campus or institution. You will need to keep this in mind when viewing your ratios and measures in the FPI Report.
- CRV should meet the current acceptable standards of construction and comply with regulatory requirements. It is recommended that the average total project cost per square foot/meter, multiplied by the gross square footage/meters of buildings, be used for the building portion of CRV.

INFRASTRUCTURE: Infrastructure primarily refers to the spaces between the buildings of a campus and to the non-architectural elements of campus design. These elements include, but are not necessarily limited to:

- ☐ Circulation systems (roadways, walkways);
- ☐ Utilities systems (sewers, drains, steam tunnels, electrical cabling, fiber optic lines);
- ☐ Parking systems;
- ☐ Campus places (natural places, recreational areas, plazas, malls);
- ☐ Paving and hard surfaces;
- ☐ Landscape (plants, trees, flowers, ground cover);
- ☐ Campus furniture (benches, drinking fountains, bus shelters, partitions);
- ☐ Way-finding and signage (entrance/exit signs, campus maps, trailblazer and directional signs, building identification), lighting;
- ☐ Refuse and waste removal (trash receptacles, smoking urns, dumpsters);
- ☐ Art and artifacts (sculpture, fountains, memorials, plaques), and
- ☐ Access points for people with disabilities

Note: Those who are excluding auxiliary services should apportion grounds, utilities and cogeneration CRV to the extent that they support general educational facilities.

CRV CALCULATION WORKSHEET

Please enter the Gross Square Footage/Meters (GSF/GSM) and Current Construction Costs per GSF/GSM for each type of space listed below. For Infrastructure, enter either a fixed amount or a percent to be applied against the sum of Current Construction Costs.

Research/Laboratory

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Classroom/Administration

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Residential

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Parking Garages

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Libraries/Museums/Archives

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Hospitals/Clinics

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Special/General Use (Retail merchandising operations, food facilities, student unions, athletic facilities, etc.)

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Historic Buildings

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Other

GSF/GSM:

Current Construction Costs per GSF/GSM:

Computed CRV:

Infrastructure

Dollar Amount (If dollar amount entered here, do not enter percent below):

Infrastructure as a percent of total building CRV. Enter as a decimal. (e.g. .30 not 30% or 30). APPA recommends using 25 percent (.25) in the absence of a dollar amount or known percentage:

TOTAL CRV:

Please note that the current replacement value should be based on your reported GSF/GSM maintained. This means that your CRV calculation may not encompass the entire GSF/GSM footprint of the campus or institution. This is important because your CRV number is used as a denominator for many ratios in the report and if you report out on your entire footprint instead of what you maintain, your ratios will be skewed. Please review the information below and modify your inputs in this worksheet and in Module 2 if necessary.

Your reported total GSF/GSM maintained from Module 2 (this should match the value below):

Your reported total GSF/GSM by space type from worksheet (this should match the value above):

CRV Calculation Worksheet comments and notes for future reference:

Module 3: Financial Questions

Is my institution adequately funding the facilities management annual budget?

The objective of this survey section is to evaluate the annual funding adequacy for facilities management. Three measurements of facilities funding are reported based on comparisons to:

- Adjusted Gross Institutional Expenditures
- GSF/GSM Maintained
- Current Replacement Value (CRV) of maintained campus buildings and their infrastructure.

3.1. Funding Questions

1. Annual facility operating expenditures:

Definition:

Total expenditures for activities required for ongoing, routine operations and maintenance of the campus. EXCLUDE THESE EXPENDITURES: Construction costs as well as major maintenance or capital renewal funded by other institutional accounts that are separate from, and not included in, the facilities operating budget. Also exclude the total cost of all Module 4A OTHER NON - FACILITIES specific related expenses and all purchased utilities (such as electricity, natural gas, propane gas, and all fossil fuels used for heating, cooling, lighting and equipment operation, as well as water and sewer) and the function of cogenerating utilities expenses. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

Operations and maintenance activities include in-house labor (including benefits), in-house non-labor expenses, and contract/outsourcing costs necessary for the administration of the facilities operation; renovation and construction; regular maintenance of a building and its basic systems or utilities (e.g., roof, electrical and mechanical systems, floors and ceilings and walls, plumbing, elevators, fire alarms, and custodial services); major maintenance funded by the annual facilities maintenance operating budget; landscaping/grounds (e.g., landscape, roads, and pathways); infrastructure (e.g., central plant, electrical distribution, water and sewer systems), including cost of maintaining water and sewer services but not purchased or cogenerated for other utilities. Reminder: AFOE includes benefits and excludes costs related to Module 4A OTHER NON - FACILITIES specific related expenses and all purchased utilities, cogeneration, and major building projects that are separately funded as well as any other construction costs.

2. Adjusted gross institutional expenditures:

Definition:

The institution's total expenditures for fiscal year 2020-21 adjusted to your auxiliary designation. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

Typically this number can be obtained from your campus Finance/Budget or Research office.

3.2. Current Replacement Value (CRV)

This is a direct entry field. We encourage you to complete the CRV Calculation Worksheet in the previous section. If you do not enter a value in this field, you must complete the worksheet. Your CRV total will auto-populate in this field from the worksheet once you complete it.

Current Replacement Value:

Definition:

CRV is the total amount of expenditures (in current dollars) required to replace the institution's facilities to its PRESENT condition. This includes the full replacement cost for all buildings, grounds, utility systems, and generating plants. Insurance replacement values or book values should **not** be used to define current replacement value. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: How do I calculate CRV?

Answer: CRV should meet the current acceptable standards of construction and comply with regulatory requirements. It is recommended that the average total project cost per square foot *by building type* be multiplied by the gross square footage of that building type. All CRV for all building types are then added together, and this constitutes the building portion of CRV. Infrastructure can be calculated two ways. The first method is by assessing the actual cost of your infrastructure and the second method is to take a percentage of your building CRV which will allow you to derive your replacement cost of infrastructure. Adding building CRV to infrastructure CRV gives you your total campus CRV.

Question: Does APPA have some rule of thumb for square foot costs to use for the CRV calculation?

Answer: The cost per GSF/GSM for CRV estimates should reflect the type of construction that your institution or neighboring campuses use and should take the regional construction costs into account. We hope that most people will use the CRV Calculation Worksheet because it provides the structure for a sound CRV estimate and ensures that infrastructure is included. APPA reviews CRV cost per GSF/GSM estimates to ensure that the cost is neither below nor above the range of reasonable CRV costs per GSF/GSM. However, these min/max figures are not useful for estimating CRV - only for catching gross errors or outliers. We consider a cost of less than \$125/GSF/GSM to be highly questionable while an average CRV of \$500/GSF/GSM is on the higher side generally even when parking garages are included as auxiliaries.

TIP:

Infrastructure primarily refers to the spaces between the buildings of a campus and to the non-architectural elements of campus design. These elements include, but are not necessarily limited to: Circulation systems (roadways, walkways) Utilities systems (sewers, drains, steam tunnels, electrical cabling, fiber optic lines) Parking systems, Campus places (natural places, recreational areas, plazas, malls) Paving and hard surfaces, Landscape (plants, trees, flowers, ground cover) Campus furniture (benches, drinking fountains, bus shelters, partitions) Way-finding and signage (entrance/exit signs, campus maps, trailblazer and directional signs, building identification, lighting) Refuse and waste removal (trash receptacles, smoking urns, dumpsters) Art and artifacts (sculpture, fountains, memorials, plaques) and access points for people with disabilities.

3.3. Financial Questions comments and notes for future reference:

Module 4.1: Facilities Administration Operational Costs and Staffing Questions

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Facilities Administration/Management Operating Costs and Staffing Module:

- Include all costs to operate and maintain facilities administration (management, financial, and clerical support) for all areas within the purview of the facilities department.
- These costs include salaries, wages, employee benefits, travel, equipment, supplies, materials, pro-rated share of telephones, postage, computer rental, accounting costs, and career training programs and other operating costs attributed to the chief administrator, assistant administrators of business management, and office personnel.
- Facilities administration of all areas of the campus includes those FTEs assigned to payroll, billing, materials ordering, personnel records, and planning for the facilities management organization.
- CAUTION: If you exclude auxiliary services in this survey, a pro-rata portion of facilities administration/management function costs are to be excluded to the extent facilities administration/management provides support to auxiliary services.
- Include all in-house and contractor FTEs.

4.1.1.

Facilities Administration GSF/GSM Questions

1. Total in-house and contractor GSF/GSM serviced by Facilities Administration:

Definition:

This data point is intended to capture the GSF/GSM of the campus served by Facilities Management Administration. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

This data point is NOT intended to capture the GSF/GSM *occupied* by Facilities Management.

2. How much of the total GSF/GSM serviced above by Facilities Administration is outsourced?:

Definition:

If a contractor exclusively performs facilities administration for a portion of the campus, enter the GSF/GSM exclusively serviced by the contractor.

(Refer to Administration Costs and Staffing Definition at the top of this module). In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

FAQ:

Question: How do I figure out the GSF/GSM for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning company that cleans part of one building, etc.

Answer: None of these contracted tasks would be reported as outsourced GSF/GSM. You would only report the GSF/GSM for *full service* of a building or a large section of a building, but not just individual tasks or partial service. Having said this, if you wanted to become really sophisticated with your estimates, you would figure out the percent of total maintenance that elevator maintenance represents and report that amount of GSF/GSM as outsourced, but we don't recommend this process. The survey is asking for full service outsourced cleaning, maintenance, etc. of a whole area or building, not just the windows or the elevators, etc.

TIP:

As an example, if a contractor is assigned specific buildings or a section of the campus to administer all facilities administrative functions, enter the GSF/GSM serviced by the contractor but if accounting services is only contracted out for administration services, **DO NOT** enter the GSF/GSM serviced by the contractor.

4.1.2.

Facilities Administration Expenditure Questions

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Total In-house labor expenditures (including benefits):

Definition:

Include all salaries, wages, and benefits. Include all miscellaneous salary categories. (e.g., overtime, shift differential, etc.). In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

A large, one-time settlement payment should be excluded because it is not comparable.

2. Total In-house non-labor and support expenditures:

Definition:

Include supplies, equipment, training, postage, uniforms, copier contracts, pre-employment physicals, travel, overhead charges, and other non-labor expenditures as well as other small service contract.

In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

3. Total outsourced contractor services expenditures:

Definition:

Include total amount spent on outsourced services for facilities administration. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

Total

4.1.3. **Total expenditures entered as a lump sum total:**

Definition:

The sum of in-house labor (including benefits), in-house non-labor expenditures, and contract/outsourcing expenditures. In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.

4.1.4. **Facilities Administration benefit as a percent of salary (Enter as a whole number):**

Definition:

Total facilities administration benefit cost (insurance, retirement, etc.) excluding the cost of sick leave and vacation. This percentage may be available from the institution's Human Resources Department or Budget Office.

FAQ:

Typically, the benefit percentage will vary by facilities job description or department and the benefit percentage is generally larger for lower salaried employees.

TIP:

Benefits are a percentage of total in-house labor expenditures. To determine the benefit percentage, calculate what portion (percentage) of your reported total in-house labor expenditures represents benefits.

4.1.5.

Facilities Administration Full-Time Equivalent (FTE) Questions

Definition:

The sum of in-house and full service contractor FTEs performing facilities administrative functions. (Refer to Facilities Administration Costs and Staffing Definition at the top of this module). [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific buildings or a section of the campus in which they administer all facilities administrative functions, enter the contractor FTE. If a significant service is provided by the contractor such as accounting services, include the contractor FTE. If a minor service is provided by the contractor such as mail services, DO NOT include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide facilities administration services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 100,000. However, a significant service such as accounting is outsourced. The contractor provides 5 FTEs to service this function. Total FTEs for campus A is 15. GSF/GSM per FTE equals 66,666. By eliminating the 5 contractor FTEs, we have underestimated the amount of resources supporting the facilities administrative function.

1. Total Facilities Administration in-house staffing FTEs:

Definition:

Regular staff or full-time equivalent (FTE) employees. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

2. Total student FTE employees included above:

Definition:

Student full-time equivalent (FTE) employees included in the In-house FTEs above. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

3. Total Facilities Administration contractor FTEs:

Definition:

The sum of full service contractor FTEs exclusively performing facilities administrative functions. (Refer to Facilities Administration Costs and Staffing Definition at the top of this module). [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

If you entered GSF/GSM exclusively serviced by contractor, you will need to ensure that your contractor FTE count is consistent with the contractor GSF/GSM reported above.

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific buildings or a section of the campus in which they exclusively administer all facilities administrative functions, enter the contractor FTE. If a significant service is provided by the contractor such as accounting services, **include** the contractor FTE. If a minor service is provided by the contractor such as mail services, **DO NOT** include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide facilities administration services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 100,000. However, a significant service such as accounting is outsourced. The contractor provides 5 FTEs to service this function. Total FTEs for campus A is 15. GSF/GSM per FTE equals 66,666. By eliminating the 5 contractor FTEs, we have underestimated the amount of resources supporting the facilities administrative function.

Total:

4.1.6.

Wage and Fringe Benefit Expenses Supporting your Facilities Organization:

<i>Executive Leadership</i> _ \$ _____	Executive leader responsible for oversight of all infrastructure, planning and facilities activity.
<i>Administrative Support</i> _ \$ _____	Administrative assistant to executive leadership.
<i>Campus Planning</i> _ \$ _____	Resource for land use master plan related to general principles, land use and facilities, environmental sustainability, open space, parking, circulation, and utility infrastructure.
<i>Human Resources</i> _ \$ _____	Human resources supporting all facilities service functions which includes labor relations, personnel activity, recruitment and onboarding, performance management, succession planning and employee appreciation events.

<i>Accounting & Service Billing</i> _____ \$ _____	Resources responsible for the accounting, budgeting, financial planning and service billing of the following services: Landscaping and grounds maintenance, building maintenance, and construction project management.
<i>Customer Service</i> _____ \$ _____	Problem resolution related to billing issues for services provided.
<i>Employee Safety</i> _____ \$ _____	Handles issues related to workplace standards, compliance codes, incident investigations, training and accident prevention. Provides management with guidance for maintaining a safe and healthy workplace.
<i>Time and attendance collection and administration</i> _____ \$ _____	Oversees and executes time and attendance business processes and coordinates with the university payroll processing department.
<i>Communications</i> _____ \$ _____	Works to understand the climate and pulse of the facilities division and serves as a sounding board for the Vice President, providing advice and guidance in support of the mission, vision, values, and organizational objectives. Recognizes internal and external communication opportunities to increase the visibility of the organization across key stakeholder audiences, thereby building and maintaining relationships with campus partners.
<i>Learning and Development</i> _____ \$ _____	Supports individual, team, and organizational development through the design, implementation, and evaluation of training solutions and learning programs (organizational learning, mobile technology, leadership, and critical software applications).
<i>Information Technology</i> _____ \$ _____	Provides technology support for facility group employees including desktop services, software, and hardware costs., software and hardware costs.
<i>Maintenance Supply Warehouse Inventory Management & Logistics</i> _____ \$ _____	Primary responsibility to support building maintenance trades with the following services: Supplies, warehouse inventory management and purchasing, equipment and tool check out, and maintenance vehicle fleet management.
<i>Construction Project accounting</i> _____ \$ _____	Resources responsible for accounting for all construction projects, insurance compliance, and interactions with the University Controller's office.
<i>Construction contract review</i> _____ \$ _____	Assures the timely review and execution for major construction contracts for planning, design and construction activity. Provides construction business process support with guidance to executive leadership, strategic communication, and issue resolution.
<i>Planning, Design and Construction KPI's</i> _____ \$ _____	Provides key performance indicators (KPIs) related to planning, design, contracts and bidding, construction and project management, and closeout
<i>Other Wage and Fringe Costs (please identify)</i> _____ \$ _____	Costs considered in facilities overhead that are not listed above.

4.1.7. Facilities Administration comments and notes for future reference:

Module 4.2: Construction/Renovation/A&E Operational Costs and Staffing Questions

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Construction/Renovation/Architectural & Engineering Operating Costs and Staffing Module:

- Include all costs to operate and maintain the duties of construction/renovation/architecture and engineering within the purview of the facilities department.
- These costs include all salaries, wages, employee benefits, travel, equipment, actual estimating, contracting, inspecting, final approval of new or renovated construction and other related projects as well as other costs required to provide technical and engineering services necessary to complete functions assigned and funded by the facilities organization.
- Construction/renovation/A&E for all areas on campus include planning, designing, engineering, contracting, managing, inspecting, financing, and administering clerical support for all capital project areas.
- Exclude the costs of capital construction projects.
- Only operating costs are reported.
- Include all in-house and contractor FTEs.

4.2.1. Construction/Renovation/A&E GSF/GSM Questions There are two GSF/GSM entries for Construction/Renovation/A&E below. You will need to decide which of the two options to report out on below. **Do NOT report out on both options.**

FAQ:

Question: Why are there two GSF/GSM entries for Construction/Renovation/A&E?

Answer: This is an either/or entry (do not answer both) because there are two ways to measure your GSF/GSM for this section. Campuses with active building programs should report the GSF/GSM (and/or dollars) for projects under planning, bidding, and construction (funded projects). As the building program expands and contracts, the budget for the group does the same. Other campuses that have no significant building program still need a Construction/Renovation/A&E group for things like capital renewal, renovation, modification, adaptation, and the occasional new building. This department usually has to review the state of campus buildings and should use the total campus GSF/GSM for which they have oversight. These campuses usually have more static staffing and budget levels than the first example above.

Option 1: Total in-house and contractor GSF/GSM serviced by Construction/Renovation/A&E:

Definition:

This data point is intended to capture the GSF/GSM of the campus served by Facilities Management Construction/Renovation/A&E. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

Option 2: Total GSF/GSM of capital construction that is FUNDED and AUTHORIZED for which department performs specific functions in this category:

Definition:

Include only the GSF/GSM of construction that is funded and authorized in the 2019-20 fiscal year. The funded GSF/GSM includes construction in the planning and design phases as well as those projects that are awarded and/or under construction. Projects that are substantially completed during the 2019-20 fiscal year are included. (Refer to Construction/Renovation/A&E Costs and Staffing Definition at the top of this module.)

In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

Campus A is anticipating 50 million dollars of construction funding for fiscal year 2019-20. You would need to determine the GSF/ GSM of the construction project(s).

For option 1 OR 2: How much of the total GSF/GSM serviced above by Construction/Renovation/A&E is outsourced?:

Definition:

If a contractor exclusively performs facilities construction/renovation/A&E for a portion of the campus, enter the GSF/GSM exclusively serviced by the contractor. (Refer to the Construction/Renovation/A&E Costs and Staffing Definition at the top of this module). In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.

FAQ:

Question: How do I figure out the GSF/GSM for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning company that cleans part of one building, etc.

Answer: None of these contracted tasks would be reported as outsourced GSF/GSM. You would only report the GSF/GSM for *full service* of a building or a large section of a building, but not just individual tasks or partial service. Having said this, if you wanted to become really sophisticated with your estimates, you would figure out the percent of total maintenance that elevator maintenance represents and report that amount of GSF/GSM as outsourced, but we don't recommend this process. The survey is asking for full service outsourced cleaning, maintenance, etc. of a whole area or building, not just the windows or the elevators etc.

TIP:

As an example, if one service such as planning is contracted out and paid for by the facilities operating budget, then do not enter the GSF/GSM serviced by the contractor. But if a contractor is performing the entire construction/renovation/A&E function for a portion of the campus, identify the GSF/GSM serviced by that contractor. Note that this GSF/GSM is a subset of the total GSF/GSM Express question above.

4.2.2.

Construction/Renovation/A&E Expenditure Questions

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Total In-house labor expenditures (including benefits):

Definition:

Include all salaries, wages, and benefits. Include all miscellaneous salary categories. (e.g., overtime, shift differential, etc.) [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

A large, one-time settlement payment should be excluded because it is not comparable.

2. Total In-house non-labor and support expenditures:

Definition:

Include supplies, equipment, training, postage, uniforms, copier contracts, pre-employment physicals, travel, overhead charges, and other non-labor expenditures as well as other small service contracts. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

3. Total outsourced contractor services expenditures:

Definition:

Include total amount spent on outsourced services that can be classified as part of annual operating costs for facilities management construction/renovation/A&E versus costs that are capitalized as part of a construction project and funded by capital funds. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

Total

4.2.3. **Total expenditures entered as a lump sum total:**

Definition:

The sum of in-house labor (including benefits), in-house non-labor expenditures, and contract/outsourcing expenditures, but **EXCLUDING actual construction expenditures**. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP: Construction project expenditures should be reported in Module 5, "Is My Institution Making the Right Investment in Our Existing Buildings, Infrastructure, and Academic Programs?" under the Expenditures Questions area.

4.2.4. **Construction/Renovation/A&E benefit as a percent of salary (Enter as a whole number):**

Definition:

Total Construction/Renovation/A&E benefit cost (insurance, retirement, etc.) excluding the cost of sick leave and vacation. This percentage may be available from the institution's Human Resources Department or Budget Office.

FAQ:

Typically, the benefit percentage will vary by facilities job description or department and the benefit percentage is generally larger for lower salaried employees.

TIP:

Benefits are a percentage of total in-house labor expenditures. To determine the benefit percentage, calculate what portion (percentage) of your reported total in-house labor expenditures represents benefits.

4.2.5.

Construction/Renovation/A&E Full-Time Equivalent (FTE) Questions

Definition:

The sum of in-house and full service contractor FTEs performing construction/renovation/A&E functions and paid by the annual facilities operating budget. (Refer to Construction/Renovation/A&E Definition at the top of this module.) Exclude personnel paid by the construction firm. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

Campus A is an institution with 5 in-house FTEs and it needs to hire a construction project manager from an outside contractor. Annual facilities operating funds will be used to pay for this additional project manager FTE. Campus A would report 6 total FTEs (5 in-house and 1 contractor).

Campus A is given 50 million dollars for a new library. These capital funds are used to hire a construction firm to build the library. Personnel hired by the construction firm are not included in contractor FTE.

1. **Total Construction/Renovation/A&E in-house staffing FTEs:**

Definition:

Regular staff or full-time equivalent (FTE) employees. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

2. **Total student FTE employees included above:**

Definition:

Student full-time equivalent (FTE) employees included in the In-house FTEs above. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

3. **Total Construction/Renovation/A&E contractor FTEs:**

Definition:

The sum of full service contractor FTEs exclusively performing Construction/Renovation/A&E functions. (Refer to Construction/Renovation/A&E Costs and Staffing Definition at the top of this module). In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

If you entered GSF/GSM exclusively serviced by contractor in question 1.A., you will need to ensure that your contractor FTE count is consistent with the contractor GSF/GSM reported above.

TIP:

Campus A is an institution with 5 in-house FTEs and it needs to hire a construction project manager from an outside contractor. Annual facilities operating funds will be used to pay for this additional project manager FTE. Campus A would report 6 total FTEs (5 in-house and 1 contractor)

Campus A is given 50 million dollars for a new library. These capital funds are used to hire a construction firm to build the library. Personnel hired by the construction firm are not included in contractor FTE.

Total:

4.2.6. Construction/Renovation/A&E comments and notes for future reference:

Module 4.3.: Custodial Operational Costs and Staffing Questions

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Custodial Operating Costs and Staffing Module:

- Include all costs to operate and maintain custodial and housekeeping services for building interior and exterior functions within the purview of the facilities department.
- These costs include salaries, wages, employee benefits, travel, equipment, and other operating costs (i.e., paper, paper towels and tissue, wax, erasers, chalk, cleaners, and other materials and supplies) associated with custodians and supervisors required to clean buildings as well as work by outside contractors to perform custodial tasks. Also include small set-ups in which materials are stored in buildings where they are used.
- Custodial/housekeeping services for all areas on campus include mopping, sweeping, and waxing floors (sanding and refinishing floors are excluded); dusting, polishing furniture and fixtures, such as Venetian blinds, partitions, pictures, maps, and radiators; cleaning chalkboards, whiteboards, trays, erasers, and replacing chalk; washing and dusting walls; cleaning and disinfecting commodes and urinals; cleaning and washing other fixtures, walls, and partitions, and replenishing restroom supplies; emptying and cleaning waste receptacles; dusting and cleaning windows (interior and exterior) and other glass surfaces; sweeping and cleaning entrances; and opening and/or closing building doors and windows.
- Refer to [APPA's Custodial Staffing Guidelines](#) publication for additional information.
- Include all in-house and contractor FTEs.

4.3.1.

Custodial GSF/GSM and Custodial CSF/CSM Questions

1. Total in-house and contractor GSF/GSM serviced by Custodial:

Definition:

This data point is intended to capture the GSF/GSM of the campus served by Facilities Management Custodial. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

This data point is NOT intended to capture the GSF/GSM *occupied* by Facilities Management.

2. How much of the total **GSF/GSM** serviced above by Custodial is outsourced?:

Definition:

If a contractor exclusively performs facilities custodial services for a portion of the campus, enter the GSF/GSM exclusively serviced by the contractor. (Refer to Custodial Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: How do I figure out the GSF/GSM for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning company that cleans part of one building, etc.

Answer: None of these contracted tasks would be reported as outsourced GSF/GSM. You would only report the GSF/GSM for *full service* of a building or a large section of a building, but not just individual tasks or partial service. Having said this, if you wanted to become really sophisticated with your estimates, you would figure out the percent of total maintenance that elevator maintenance represents and report that amount of GSF/GSM as outsourced, but we don't recommend this process. The survey is asking for full service outsourced cleaning, maintenance, etc. of a whole area or building, not just the windows or the elevators etc.

TIP: As an example, if a one time trash pick-up is contracted out for custodial services, do not enter the GSF/GSM serviced by the contractor, but if a contractor is assigned to clean specific buildings in lieu of in-house custodial staff, enter the GSF/GSM serviced by the contractor.

3. Total in-house and contractor **CSF/CSM** serviced by Custodial:

Definition:

This data point is intended to capture the Cleanable Square Feet/Meters (CSF/CSM) of the campus served by Facilities Management Custodial. Cleanable Square Feet/Meters is a measurement of the space in buildings that is actually being cleaned by Facilities Management Custodial. It excludes space in buildings that for whatever reason is not being cleaned by Facilities Management Custodial. CSF/CSM is measured from interior wall to interior wall of spaces being cleaned. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

What is the difference between GSF/GSM and CSF/CFM? GSF/GSM simply measures the entire area of a building serviced by the custodial department and often includes space in the building that is not actually cleaned by the custodial department, but CSF/CSM is the total net square feet of space that is actually cleaned by the custodial department. Include only space that is cleaned at least once per year by the custodial department.

CSF/CSM is measured from interior wall to interior wall of spaces being cleaned, and excludes all space that is not being cleaned (examples of space not being cleaned are mechanical rooms, boiler rooms, electrical rooms, and special spaces such as sensitive laboratories that are cleaned by non-custodial department personnel). If the custodial department is not responsible for cleaning the space then do not include the space in the cleanable square feet/meter measurement.

4. How much of the total **CSF/CSM** serviced above by Custodial is outsourced?:

Definition:

If a contractor exclusively performs all facilities custodial tasks for a portion of the campus with no custodial tasks performed by in-house personnel for this portion of the campus, enter the CSF/CSM exclusively serviced by the contractor. (Refer to the Cleanable Square Feet/Meters definition in question 1.B. above.)
[In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: How do I figure out the CSF/CSM for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning contractor that cleans window for the entire campus, etc.

Answer: None of these contracted services would be reported as outsourced CSF/CSM. You would only report the CSF/CSM when a contractor performs all the tasks of a specific function for buildings or a large section of a building, but not just individual tasks. The survey is asking for CSF/CSM of space where the entire function (for example all custodial tasks) is performed exclusively by contractor personnel with no tasks of the function performed by in-house personnel.

TIP: As an example, if a one-time trash pick-up is contracted out for custodial services, or if window cleaning for the entire campus is performed by a contractor under a window cleaning contract, do not enter the CSF/CSM for this service, but if a contractor is assigned to perform all custodial tasks for specific buildings in lieu of in-house custodial staff, enter the CSF/CSM serviced by the contractor.

4.3.2.

Custodial Expenditure Questions

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Total in-house labor expenditures (including benefits):

Definition:

Include all salaries, wages, and benefits. Include all miscellaneous salary categories. (e.g., overtime, shift differential, etc.). [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

A large, one-time settlement payment should be excluded because it is not comparable.

2. Total in-house non-labor and support expenditures:

Definition:

Include supplies, equipment, training, postage, uniforms, copier contracts, pre-employment physicals, travel, overhead charges, and other non-labor expenditures as well as other small service contracts. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

2a. Consumable supplies expenditures included above:

Definition:

Those consumable supplies used directly to perform the custodial services cleaning processes to include consumable supplies such as chemicals, hand cleaners, toilet paper, paper towels, trash bags, mops, brooms, microfiber cloths, small low cost consumable hand tools and devices, walk-off mats, and personal protective equipment (PPE) safety items such as gloves, goggles, and dust masks. Exclude items such as uniforms, jackets, hats, gloves, etc. that are not consumed as a result of the act of cleaning.

2b. Capital equipment expenditures included above:

Definition:

Those machines, implements, devices, and long lasting tools used directly to perform the custodial services cleaning processes to include non-consumable items such as floor machines, vacuum cleaners, floor scrubbers, extractors, buffers, janitor carts, mop buckets, and other long lasting and/or high-cost items. Capital equipment generally includes high-cost long lasting items that are expected to be in service for multiple years. Exclude items reported as consumable supplies or those items purchased outside the annual operating budget. When it is not clear as to whether an item should be considered consumable supplies or capital equipment, many organizations have a monetary threshold that defines capital equipment versus consumable supply items.

3. Total outsourced contractor services expenditures:

Definition:

Include total amount spent on outsourced services for custodial services. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

3a. Contractor consumable supplies expenditures included above:

Definition:

Those contractor consumable supplies used directly to perform the custodial services cleaning processes to include consumable supplies such as chemicals, hand cleaners, toilet paper, paper towels, trash bags, mops, brooms, microfiber cloths, small low cost consumable hand tools and devices, walk-off mats, and personal protective equipment (PPE) safety items such as gloves, goggles, and dust masks. Exclude items such as uniforms, jackets, hats, gloves, etc. that are not consumed as a result of the act of cleaning.

3b. Contractor equipment expenditures included above:

Definition:

Those machines, implements, devices, and long lasting tools used directly to perform the contracted custodial services cleaning processes to include non-consumable items such as floor machines, vacuum cleaners, floor scrubbers, extractors, buffers, janitor carts, mop buckets, and other long lasting and/or high-cost items. Capital equipment generally includes high-cost long lasting items that are expected to be in service for multiple years. Exclude items reported as consumable supplies or those items purchased outside the annual operating budget. When it is not clear as to whether an item should be considered consumable supplies or capital equipment, many organizations have a monetary threshold that defines capital equipment versus consumable supply items.

Total

4.3.3. **Total expenditures entered as a lump sum total:**

Definition:

The sum of in-house labor (including benefits), in-house non-labor expenditures, as well as contract/outourcing expenditures. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries.](#) Ensure that this data point is consistent with that designation.

4.3.4. **Custodial benefit as a percent of salary (Enter as a whole number):**

Definition:

Total custodial benefit cost (insurance, retirement, etc.) excluding the cost of sick leave and vacation. This percentage may be available from the institution's Human Resources Department or Budget Office.

FAQ:

Typically, the benefit percentage will vary by facilities job description or department and the benefit percentage is generally larger for lower salaried employees.

TIP:

Benefits are a percentage of total in-house labor expenditures. To determine the benefit percentage, calculate what portion (percentage) of your reported total in-house labor expenditures represents benefits.



4.3.5. **Please indicate your institution's current overall campus Custodial service level based on APPA's Operational Guidelines for Educational Facilities: Custodial**

Level 1: Orderly Spotlessness

Level 2: Ordinary Tidiness

Level 3: Casual Inattention

Level 4: Moderate Dinginess

Level 5: Unkempt Neglect

Definition: Level 1 Orderly Spotlessness:

- Floors and base moldings shine and/or are bright and clean; colors are fresh. There is no build-up in corners or along walls.
- All vertical and horizontal surfaces have a freshly cleaned or polished appearance and have no accumulation of dust, dirt, marks, streaks, smudges, or fingerprints. Lights all work and fixtures are clean.
- Washroom and shower fixtures and tile gleam and are odor-free. Supplies are adequate.
- Trash containers and pencil sharpeners hold only daily waste, are clean and odor-free.

Level 2 Ordinary Tidiness:

- Floors and base moldings shine and/or are bright and clean. There is no build-up in corners or along walls, but there can be up to two day's worth of dust, dirt, stains, or streaks.
- All vertical and horizontal surfaces are clean, but marks, dust, smudges, and fingerprints are noticeable upon close observation. Lights all work and fixtures are clean.
- Washroom and shower fixtures and tile gleam and are odor-free. Supplies are adequate.
- Trash containers and pencil sharpeners hold only daily waste, are clean and odor-free.

Level 3 Casual Inattention:

- Floors are swept or vacuumed clean, but upon close observation there can be stains. A build-up of dirt and/or floor finish in corners and along walls can be seen.
- There are dull spots and/or matted carpet in walking lanes. There are streaks or splashes on base molding.
- All vertical and horizontal surfaces have obvious dust, dirt, marks, smudges, and fingerprints. Lamps all work and fixtures are clean.
- Trash containers and pencil sharpeners hold only daily waste, are clean and odor-free.

Level 4 Moderate Dinginess:

- Floors are swept or vacuumed clean, but are dull, dingy, and stained. There is a noticeable build-up of dirt and/or floor finish in corners and along walls.
- There is a dull path and/or obviously matted carpet in the walking lanes. Base molding is dull and dingy with streaks or splashes.
- All vertical and horizontal surfaces have conspicuous dust, dirt, smudges, fingerprints, and marks. Lamp fixtures are dirty and some lamps (up to 5 percent) are burned out.
- Trash containers and pencil sharpeners have old trash and shavings. They are stained and marked.
- Trash containers smell sour.

Level 5 Unkempt Neglect:

- Floors and carpets are dull, dirty, dingy, scuffed, and/or matted. There is a conspicuous build-up of old dirt and/or floor finish in corners and along walls. Base molding is dirty, stained, and streaked. Gum, stains, dirt, dust balls, and trash are broadcast.
- All vertical and horizontal surfaces have major accumulations of dust, dirt, smudges, and fingerprints, all of which will be difficult to remove. Lack of attention is obvious.
- Light fixtures are dirty with dust balls and flies. Many lamps (more than 5 percent) are burned out.
- Trash containers and pencil sharpeners overflow. They are stained and marked. Trash containers smell sour.

4.3.6.

Custodial Full-Time Equivalent (FTE) Questions

Definition:

The sum of in-house and full service contractor FTEs performing custodial functions. (Refer to the Custodial Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

When should contractor FTEs be included? If a contractor is assigned specific buildings or a section of the campus in which they administer all facilities custodial functions, enter the contractor FTE. If a significant service is provided by the contractor such as maintaining all restrooms on campus, **include** the contractor FTE. If a minor service is provided by the contractor such as a large one-time trash collection request, **DO NOT** include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide custodial services to 1,000,000 GSF/GSM. GSF/GSM per in-house FTE equals 100,000. However, a significant service such as maintaining all restrooms on campus is outsourced.

The contractor provides 8 FTEs to service this function. Total FTEs for campus A is 18. GSF/GSM per FTE equals 61,111. By eliminating the 8 contractor FTEs, we have underestimated the amount of resources supporting the custodial function.

1. **Total Custodial in-house staffing FTEs (excluding student FTEs):**

Definition:

Regular staff or full-time equivalent (FTE) employees. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

2. **Total student FTE employees included above:**

Definition:

Student full-time equivalent (FTE) employees included in the In-house FTEs above. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

3. **Total Custodial contractor FTEs:**

Definition:

The sum of full service contractor FTEs exclusively performing custodial functions. (Refer to Custodial Costs and Staffing Definition at the top of this module). In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

If you entered GSF/GSM exclusively serviced by contractor, you will need to ensure that your contractor FTE count is consistent with the contractor GSF/GSM reported above.

FAQ:

When should contractor FTEs be included? If a contractor is assigned specific buildings or a section of the campus in which they administer all facilities custodial functions, enter the contractor FTE. If a significant service is provided by the contractor such as maintaining all restrooms on campus, **include** the contractor FTE. If a minor service is provided by the contractor such as a large one-time trash collection request, **DO NOT** include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide custodial services to 1,000,000 GSF/GSM. GSF/GSM per in-house FTE equals 100,000. However, a significant service such as maintaining all restrooms on campus is outsourced. The contractor provides 8 FTEs to service this function. Total FTEs for campus A is 18. GSF/GSM per FTE equals 61,111. By eliminating the 8 contractor FTEs, we have underestimated the amount of resources supporting the custodial function.

Total:

4.3.7. Custodial comments and notes for future reference:

Module 4.4.: Grounds/Landscaping Operational Costs and Staffing Questions

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Landscaping/Grounds Operating Costs and Staffing Module:

- Include all costs to operate and maintain campus landscapes and grounds within the purview of the facilities department.
- These costs include salaries, wages, employee benefits, travel, equipment, and other operating costs associated with all supervisory and operating personnel. Also include work by outside contractors to perform landscaping and grounds maintenance.
- Maintenance of all areas of the campus includes growing plants, trees, grass, shrubs, flowers, nursery stock, seed, fertilizers, plant materials, physical education and intramural areas, ROTC drill fields, open ditch drainage, fences, retaining walls, and riprap. Also include care of miscellaneous fixed equipment such as benches and shelter houses. Operation and replacement costs of all equipment used in connection with grounds maintenance should be included as well.
- Refer to [APPA's Grounds Staffing Guidelines](#) publication for additional information.
- Include all in-house and contractor FTEs.

4.4.1.

Grounds/Landscaping Acres/Hectares Questions

1. Total in-house and contractor Acres/Hectares serviced by Grounds/Landscaping excluding building footprints:

Definition:

This data point is intended to capture the Acres/Hectares of the campus served by Facilities Management Landscaping/Grounds. Please be sure to EXCLUDE all building footprints from this number. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

This data point is NOT intended to capture the Acres/Hectares *occupied* by Facilities Management.

2. How much of the total Acres/Hectares serviced above by Grounds/Landscaping is outsourced?:

Definition:

If a contractor exclusively performs facilities landscaping/grounds for a portion of the campus, enter the Acres/Hectares exclusively serviced by the contractor. (Refer to Landscaping/Grounds Costs and Staffing Definition at the top of this module.) *In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.*

FAQ:

Question: How do I figure out the GSF/GSM (or Acres/Hectares) for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning company that cleans part of one building, etc.

Answer: None of these contracted tasks would be reported as outsourced GSF/GSM. You would only report the GSF/GSM for *full service* of a building or a large section of a building, but not just individual tasks or partial service. Having said this, if you wanted to become really sophisticated with your estimates, you would figure out the percent of total maintenance that elevator maintenance represents and report that amount of GSF/GSM as outsourced, but we don't recommend this process. The survey is asking for full service outsourced cleaning, maintenance, etc. of a whole area or building, not just the windows or the elevators etc.

TIP:

As an example, if a contractor is assigned specific zones or areas of grounds or a section of the campus to administer all facilities landscaping/grounds functions, enter the Acres/Hectares serviced by the contractor but if for example, limited water delivery services are contracted out for landscaping/grounds services, **DO NOT** enter the Acres/Hectares serviced by the contractor.

4.4.2.

Grounds/Landscaping Expenditure Questions

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Total In-house labor expenditures (including benefits):

Definition:

Include all salaries, wages, and benefits. Include all miscellaneous salary categories. (e.g., overtime, shift differential, etc.). *In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.*

TIP: A large, one-time settlement payment should be excluded because it is not comparable.

2. Total In-house non-labor and support expenditures:

Definition:

Include supplies, equipment, training, postage, uniforms, copier contracts, pre-employment physicals, travel, overhead charges, and other non-labor expenditures as well as other small service contracts. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

3. Total outsourced contractor services expenditures:

Definition:

Include total amount spent on outsourced services for landscaping/grounds. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

Total

4.4.3. **Total expenditures entered as a lump sum total:**

Definition:

The sum of in-house labor (including benefits), in-house non-labor expenses, and contract/outsourcing costs. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

4.4.4. **Grounds/Landscaping benefit as a percent of salary (Enter as a whole number):**

Definition:

Total landscaping/grounds benefit cost (insurance, retirement, etc.) excluding the cost of sick leave and vacation. This percentage may be available from the institution's Human Resources Department or Budget Office.

FAQ:

Typically, the benefit percentage will vary by facilities job description or department and the benefit percentage is generally larger for lower salaried employees.

TIP:

Benefits are a percentage of total in-house labor expenditures. To determine the benefit percentage, calculate what portion (percentage) of your reported total in-house labor expenditures represents benefits.

4.4.5. **Please indicate your institution's current overall campus Grounds/Landscaping service level based on APPA's Operational Guidelines for Educational Facilities: Grounds**

Level 1: Turf State of the Art Maintenance

Level 2: Turf High Level Maintenance

Level 3: Turf Moderate Level Maintenance

Level 4: Turf Moderately Low Level Maintenance

Level 5: Turf Minimum Level Maintenance

Descriptions of landscape maintenance levels are very lengthy. To provide an insight into maintenance levels, Turf Care alone is highlighted below. For more information, see APPA's Grounds Staffing Guidelines publication.

Level 1 Turf State of the Art Maintenance:

Grass height maintained according to species and variety of grasses. Mowed at least once every five days. Aeration as required but not less than four times per year. Reseeding or resodding as needed. Weed control to be practiced so that no more than 1 percent of the surface has weeds present.

Level 2 Turf High Level Maintenance:

Grass cut once every five working days. Aeration as required but not less than two times per year. Reseeding or resodding when bare spots are present. Weed control practiced when weeds present a visible problem or when weeds represent 5 percent of the turf surface. Some pre-emergent products may be used at this level.

Level 3 Turf Moderate Level Maintenance:

Grass cut once every ten working days. Normally not aerated unless turf quality indicates a need or in anticipation of an application of fertilizers. Reseeding or resodding done only when major bare spots appear. Weed control measures normally used when 50 percent of small areas are weed infested or when 15 percent of the general turf is infested with weeds.

Level 4 Turf Moderately Low Level Maintenance:

Low frequency mowing scheduled based on species. Low growing grasses may not be mowed. High grasses may receive periodic mowing. Weed control limited to legal requirements for noxious weeds.

Level 5 Turf Minimum Level Maintenance:

Low frequency mowing scheduled based on species. Low growing grasses may not be mowed. High grasses may receive periodic mowing. Weed control limited to legal requirements for noxious weeds.

4.4.6.

Grounds/Landscaping Full-Time Equivalent (FTE) Questions

Definition:

The sum of in-house and full service contractor FTEs performing landscaping/grounds functions. (Refer to Landscaping/Grounds Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific zones or a section of the campus in which they administer all facilities landscaping/grounds functions, enter the contractor FTE. If a significant service is provided by the contractor such as campus-wide hedge trimming services, include the contractor FTE. If a minor service is provided by the contractor such as water delivery for a section of the campus, DO NOT include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide landscaping/grounds services to 165 Acres/Hectares. Acres/Hectares per FTE equals 16.5. However, a significant service such as campus wide hedge trimming is outsourced. The contractor provides 5 FTEs to service this function. Total FTEs for campus A is 15. Acres/Hectares per FTE equals 11. By eliminating the 5 contractor FTEs, we have underestimated the amount of resources supporting the landscaping/grounds function.

1. Total Grounds/Landscaping in-house staffing FTEs:

Definition:

Regular staff or full-time equivalent (FTE) employees. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

2. Total student FTE employees included above:

Definition:

Student full-time equivalent (FTE) employees included in the In-house FTEs above. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year
OR 1 person working 100% time for a half-year.

3. Grounds/Landscaping contractor FTEs:**Definition:**

The sum of full service contractor FTEs exclusively performing landscaping/grounds functions. (Refer to Landscaping/Grounds Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

If you entered Acres/Hectares exclusively serviced by contractor, you will need to ensure that your contractor FTE count is consistent with the contractor Acres/Hectares reported above.

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific zones or a section of the campus in which they administer all facilities landscaping/grounds functions, enter the contractor FTE. If a significant service is provided by the contractor such as campus-wide hedge trimming services, **include** the contractor FTE. If a minor service is provided by the contractor such as water delivery for a section of the campus, **DO NOT** include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide landscaping/grounds services to 165 Acres/Hectares. Acres/Hectares per FTE equals 16.5. However, a significant service such as campus wide hedge trimming is outsourced. The contractor provides 5 FTEs to service this function. Total FTEs for campus A is 15. Acres/Hectares per FTE equals 11. By eliminating the 5 contractor FTEs, we have underestimated the amount of resources supporting the landscaping/grounds function.

Total:**4.4.7. Grounds/Landscaping comments and notes for future reference:**

Module 4.5.: Building Maintenance Operational Costs and Staffing Questions

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Building Maintenance Operating Costs and Staffing Module:

- Include all costs to operate and maintain the interiors and exteriors of all buildings within the purview of the facilities department.
- These costs include salaries, wages, employee benefits, travel, equipment, work by outside contractors to perform building maintenance tasks, plumbing, heating, air conditioning, and ventilation, routine repairs, minor corrective maintenance, MMBTUs maintenance, and service calls. Electrical repairs of all types, including primary and secondary systems, certain lamp replacements (requiring special ladders and rigging) and maintenance of outdoor lighting fixtures (excluding energy costs). Also include carpentry, cabinet making, painting, glazing, hardware, locks, keys, closures, and records for same. Include roofing and sheet metal work, including downspouts and gutters, welding, and necessary machine work.
- Maintenance of all areas of the campus includes proper planning, scheduling, dispatching of maintenance work, work management, dispatching of work orders, shop scheduling, and execution of work. Also include developing and revising work orders, cost estimates, maintaining historical maintenance databases, maintaining system configuration, supervising trades people, reconciling estimates with actual costs, maintaining installed computerized maintenance management systems, and maintaining a customer interface.
- Refer to [APPA's Maintenance Staffing Guidelines](#) publication for additional information.
- Include all in-house and contractor FTEs.

4.5.1.

Building Maintenance GSF/GSM Questions

1. Total in-house and contractor GSF/GSM serviced by Building Maintenance:

Definition:

This data point is intended to capture the GSF/GSM of the campus served by Facilities Management Maintenance. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries.](#) Ensure that this data point is consistent with that designation.

TIP:

This data point is NOT intended to capture the GSF/GSM *occupied* by Facilities Management.

2. How much of the total GSF/GSM serviced above by Building Maintenance is outsourced?:

Definition:

If a contractor exclusively performs facilities maintenance for a portion of the campus, enter the GSF/GSM exclusively serviced by the contractor. (Refer to Maintenance Costs and Staffing Definition at the top of this module). [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: How do I figure out the GSF/GSM for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning company that cleans part of one building, etc.

Answer: None of these contracted tasks would be reported as outsourced GSF/GSM. You would only report the GSF/GSM for *full service* of a building or a large section of a building, but not just individual tasks or partial service. Having said this, if you wanted to become really sophisticated with your estimates, you would figure out the percent of total maintenance that elevator maintenance represents and report that amount of GSF/GSM as outsourced, but we don't recommend this process. The survey is asking for full service outsourced cleaning, maintenance, etc. of a whole area or building, not just the windows or the elevators etc.

TIP:

As an example, if a contractor is assigned specific buildings or a section of the campus to administer all facilities maintenance functions, enter the GSF/GSM serviced by the contractor but if water treatment services are only contracted out for maintenance services, **DO NOT** enter the GSF/GSM serviced by the contractor.

4.5.2.

Building Maintenance Expenditure Questions

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Total In-house labor expenditures (including benefits):

Definition:

Include all salaries, wages, and benefits. Include all miscellaneous salary categories. (e.g., overtime, shift differential, etc.). [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

A large, one-time settlement payment should be excluded because it is not comparable.

2. Total In-house non-labor and support expenditures:

Definition:

Include supplies, equipment, training, postage, uniforms, copier contracts, pre-employment physicals, travel, overhead charges, and other non-labor expenditures as well as other small service contracts. **DO NOT** include repair materials and spare parts expenditures in this field. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

3. Total outsourced contractor services expenditures:

Definition:

Include total amount spent on outsourced services for maintenance. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

3a. Total repair materials and spare parts:

FAQ:

Question: What if I can't separate repair materials and spare parts from non-labor expenditures?

Answer: If this is the case, do not make an entry under Total Repair Materials & Spare Parts. Do not report the expenses twice.

Total

4.5.3. **Total expenditures entered as a lump sum total:**

Definition:

The sum of in-house labor (including benefits), in-house non-labor expenditures, and contract/outsourcing expenditures. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

4.5.4. **Building Maintenance benefit as a percent of salary (Enter as a whole number):**

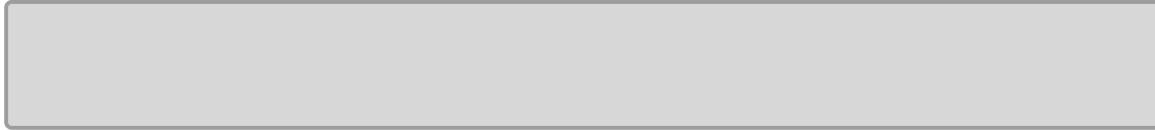
Definition:

Total building maintenance benefit cost (insurance, retirement, etc.) excluding the cost of sick leave and vacation. This percentage may be available from the institution's Human Resources Department or Budget Office.

FAQ:

Typically, the benefit percentage will vary by facilities job description or department and the benefit percentage is generally larger for lower salaried employees.

TIP: Benefits are a percentage of total in-house labor expenditures. To determine the benefit percentage, calculate what portion (percentage) of your reported total in-house labor expenditures represents benefits.



4.5.5. **Please indicate your institution's current overall campus Building Maintenance service level based on APPA's Operational Guidelines for Educational Facilities: Maintenance**

Level 1: Showpiece Facility

Level 2: Comprehensive Stewardship

Level 3: Managed Care

Level 4: Reactive Management

Level 5: Crisis Response

Level 1: Showpiece Facility:

Maintenance activities appear highly focused. Typically, equipment and building components are fully functional and in excellent operating condition. Service and maintenance calls are responded to immediately. Buildings and equipment are regularly upgraded, keeping them current with modern standards and usage.

Level 2: Comprehensive Stewardship:

Maintenance activities appear organized with direction. Equipment and building components are usually functional and in operating condition. Service and maintenance calls are responded to in a timely manner. Buildings and equipment are regularly upgraded, keeping them current with modern standards and usage.

Level 3: Managed Care:

Maintenance activities appear to be somewhat organized, but they remain people-dependent. Equipment and building components are mostly functional, but they suffer occasional breakdowns. Service and maintenance call response times are variable and sporadic without apparent cause. Buildings and equipment are periodically upgraded to current standards and usage, but not enough to control the effects of normal usage and deterioration.

Level 4: Reactive Management:

Maintenance activities appear to be somewhat chaotic and are people-dependent. Equipment and building components are frequently broken and inoperative. Service and maintenance calls are typically not responded to in a timely manner. Normal usage and deterioration continues unabated, making buildings and equipment inadequate to meet present usage needs.

Level 5: Crisis Response:

Maintenance activities appear chaotic and without direction. Equipment and building components are routinely broken and inoperative. Service and maintenance calls are never responded to in a timely manner. Normal usage and deterioration continues unabated, making buildings and equipment inadequate to meet present usage needs.

4.5.6.

Building Maintenance Full-Time Equivalent (FTE) Questions

Definition:

The sum of in-house and full service contractor FTEs performing maintenance functions. (Refer to Building Maintenance Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific buildings or a section of the campus in which they administer all facilities maintenance functions, enter the contractor FTE. If a significant service is provided by the contractor such as all preventive maintenance services, **include** the contractor FTE. If a minor service is provided by the contractor such as water treatment services, **DO NOT** include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide maintenance services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 100,000. However, a significant service such as preventive maintenance is outsourced. The contractor provides 6 FTEs to service this function. Total FTEs for campus A is 16. GSF/GSM per FTE equals 68,750. By eliminating the 6 contractor FTEs, we have underestimated the amount of resources supporting the maintenance function.

1. Total Building Maintenance in-house staffing FTEs:

Definition:

Regular staff or full-time equivalent (FTE) employees. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

2. **Total student FTE employees included above:**

Definition:

Student full-time equivalent (FTE) employees included in the In-house FTEs above. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

3. **Building Maintenance contractor FTEs:**

Definition:

The sum of full service contractor FTEs exclusively performing maintenance functions. (Refer to Building Maintenance Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

If you entered GSF/GSM exclusively serviced by contractor, you will need to ensure that your contractor FTE count is consistent with the contractor GSF/GSM reported above.

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific buildings or a section of the campus in which they administer all facilities maintenance functions, enter the contractor FTE. If a significant service is provided by the contractor such as all preventive maintenance services, **include** the contractor FTE. If a minor service is provided by the contractor such as water treatment services, **DO NOT** include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide maintenance services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 100,000. However, a significant service such as preventive maintenance is outsourced. The contractor provides 6 FTEs to service this function. Total FTEs for campus A is 16. GSF/GSM per FTE equals 68,750. By eliminating the 6 contractor FTEs, we have underestimated the amount of resources supporting the maintenance function.

Total:

4.5.7. Building Maintenance comments and notes for future reference:

MMBTU (One Million British Thermal Units) Calculation Worksheet

This worksheet converts commonly used units of energy into British Thermal Units (BTUs) so that comparisons can be made on total energy consumption. The conversion involves multiplying units of energy by factors and while this is simple arithmetic, it can be perplexing. For this reason, we request that you enter the name of the person to contact regarding BTU calculations in the Energy/Utilities Operating Costs and Staffing Module.

The worksheet is organized as follows: The first part of the worksheet asks for your total energy purchased or consumed on campus (***include auxiliaries regardless of your auxiliaries' designation***). The second part contains entries on total energy distributed to or consumed by auxiliary services specifically. The third part contains entries on total energy sold or distributed to external entities.

When the entries in this worksheet are saved, your calculated MMBTU will be automatically populated into the Energy/Utilities Operating Costs and Staffing Module. You may change entries in this worksheet and resubmit your new MMBTU calculation if you find you have made errors in some of the data fields below.

The BTU calculation is based on conversion factors for each type of energy. A default factor is shown but you can override the default factor by entering a substitute BTU conversion number. DO NOT CHANGE THE ENERGY SOURCE TOTALS.

TOTAL ENERGY CONSUMED INCLUDING AUXILIARIES:

Legend Of Units:
kLbs = 1,000 pounds of steam
Therm = 100,000 BTUs
kTon-h = 1,000 ton-hrs
MCF = 1,000 cubic feet of gas

	Energy Source Totals	Default Factor	Total MMBTU
Total MMBTU Calculation			
Gallons of Oil #1	<input type="text"/>	138000	<input type="text"/>
Gallons of Oil #2:	<input type="text"/>	139000	<input type="text"/>
Gallons of Oil #3:	<input type="text"/>	140000	<input type="text"/>
Gallons of Oil #4:	<input type="text"/>	150000	<input type="text"/>
Gallons of Oil #5:	<input type="text"/>	145000	<input type="text"/>
Gallons of Oil #6:	<input type="text"/>	150000	<input type="text"/>
Tons of Coal:	<input type="text"/>	24000000	<input type="text"/>
Tons of Wood:	<input type="text"/>	12000000	<input type="text"/>
kWh of Electricity:	<input type="text"/>	3412	<input type="text"/>
kLbs of Steam:	<input type="text"/>	1000000	<input type="text"/>
Therms of Hot Water:	<input type="text"/>	100000	<input type="text"/>
Kton-h of Chilled Water:	<input type="text"/>	12000000	<input type="text"/>
MCF of Natural Gas:	<input type="text"/>	1000000	<input type="text"/>
Other Energy Source:			
<div></div>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total MMBTU (Gross Purchased Energy):	<input type="text"/>	<input type="text"/>	<input type="text"/>

RESALE: SALES TO AUXILIARIES:

Definition:

An auxiliary service is an entity that exists to furnish goods or services primarily to students, faculty, or staff, and that charges a fee directly related to, although not necessarily equal to, the cost of the goods or services. The distinguishing characteristic of auxiliary services is that they are managed as essentially self-supporting activities. Examples are: residence halls, food services, college stores, student health centers, golf courses, parking, and laundry.

Legend Of Units:

kLbs = 1,000 pounds of steam

Therm = 100,000 BTUs

kTon-h = 1,000 ton-hrs

MCF = 1,000 cubic feet of gas

	Energy Source Totals	Default	Total MMBTU Calculation
kWh of Electricity:	<input type="text"/>	<input type="text" value="3412"/>	<input type="text"/>
kLbs of Steam:	<input type="text"/>	<input type="text" value="1000000"/>	<input type="text"/>
Therms of Hot Water:	<input type="text"/>	<input type="text" value="100000"/>	<input type="text"/>
Kton-h of Chilled Water:	<input type="text"/>	<input type="text" value="12000000"/>	<input type="text"/>
MCF of Natural Gas:	<input type="text"/>	<input type="text" value="1000000"/>	<input type="text"/>
Other Energy Source:			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total MMBTU Resale to Auxiliaries:	<input type="text"/>	<input type="text"/>	<input type="text"/>

RESALE: SALES TO EXTERNAL ORGANIZATIONS:

Definition:

External organizations are those which are not part of the institution. Examples are private businesses in a college research park, a utility company that is purchasing energy from the campus, a Veteran's Administration Hospital on a campus, etc.

Legend Of Units:

kLbs = 1,000 pounds of steam

Therm = 100,000 BTUs

kTon-h = 1,000 ton-hrs

MCF = 1,000 cubic feet of gas

	Energy Source Totals	Default Factor	Total MMBTU Calculation
kWh of Electricity:	<input type="text"/>	<input type="text" value="3412"/>	<input type="text"/>
kLbs of Steam:	<input type="text"/>	<input type="text" value="1000000"/>	<input type="text"/>
Therms of Hot Water:	<input type="text"/>	<input type="text" value="100000"/>	<input type="text"/>
Kton-h of Chilled Water:	<input type="text"/>	<input type="text" value="12000000"/>	<input type="text"/>
MCF of Natural Gas:	<input type="text"/>	<input type="text" value="1000000"/>	<input type="text"/>
Other Energy Source:			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Total MMBTU Resale to External Orgs:	<input type="text"/>	<input type="text"/>	<input type="text"/>

Total MMBTU Consumption values based on completed criteria in this worksheet:

Total MMBTU which excludes Sales to Auxiliaries and External Organizations:

Total MMBTU Resale to Auxiliaries:

Total MMBTU Resale to External Organizations:

MMBTU Worksheet comments and notes for future reference:

Module 4.6.: Energy/Utilities Operational Costs and Staffing Questions

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Energy/Utilities Operating Costs and Staffing Module:

- Include all consumption and costs to operate and maintain energy services to include all purchased/cogenerated utilities and utilities distribution within the purview of the facilities department.
- These costs include salaries, wages, employee benefits, travel, equipment, and other operating costs such as purchased utilities (i.e. electricity, natural gas, propane gas, and all fossil fuels used for heating, cooling, lighting, and equipment operation. Also include water and sewer).
- If you know your MMBTU consumption, you can enter the amount directly into the appropriate field, but we prefer that you complete the MMBTU Calculation Worksheet. The MMBTU Calculation Worksheet converts commonly used units of energy into British Thermal Units (BTUs) so that comparisons can be made on total energy consumption. The conversion involves multiplying units of energy by factors; while this is simple arithmetic, it can be perplexing. For this reason, we ask you to provide a person to contact regarding Million BTU Calculation Worksheet entries.
- Include all in-house and contractor FTEs.

4.6.1.

Energy/Utilities GSF/GSM Questions

1. Total in-house and contractor GSF/GSM serviced by Energy/Utilities:

Definition:

This data point is intended to capture the GSF/GSM of the campus served by Facilities Management Energy/Utilities. Include cogeneration GSF/GSM and also everything under a fullservice contract. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

This data point is NOT intended to capture the GSF/GSM *occupied* by Facilities Management.

2. How much of the total GSF/GSM serviced above by Energy/Utilities is outsourced?:

Definition:

If a contractor exclusively performs facilities energy/utilities for a portion of the campus, enter the GSF/GSM exclusively serviced by the contractor. (Refer to Energy/Utilities Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: How do I figure out the GSF/GSM for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning company that cleans part of one building, etc.

Answer: None of these contracted tasks would be reported as outsourced GSF/GSM. You would only report the GSF/GSM for *full service* of a building or a large section of a building, but not just individual tasks or partial service. Having said this, if you wanted to become really sophisticated with your estimates, you would figure out the percent of total maintenance that elevator maintenance represents and report that amount of GSF/GSM as outsourced, but we don't recommend this process. The survey is asking for full service outsourced cleaning, maintenance, etc. of a whole area or building, not just the windows or the elevators etc.

TIP:

As an example, if a contractor is assigned specific buildings or a section of the campus to administer all facilities energy/utilities functions, enter the GSF/GSM serviced by the contractor but if only chiller maintenance is contracted out for energy/utilities, **DO NOT** enter the GSF/GSM serviced by the contractor.

3. How much of the total GSF/GSM is serviced by cogenerated energy?:

Definition:

Indicate the portion of GSF/GSM for which cogenerated energy is distributed on campus. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

4. How much of the total GSF/GSM is serviced by a district utility system?:

Definition:

Indicate the portion of GSF/GSM for which a district utility system (also known as a central energy system containing a boiler/heating plant and chiller/cooling plant which serves multiple buildings on campus) is distributed on campus. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

4.6.2.

Energy/Utilities Expenditure Questions

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Total In-house labor expenditures (including benefits):

Definition:

Include all salaries, wages, and benefits. Include all miscellaneous salary categories. (e.g., overtime, shift differential, etc.). [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

A large, one-time settlement payment should be excluded because it is not comparable.

2. Total In-house non-labor and support expenditures:

Definition:

Include supplies, equipment, training, postage, uniforms, copier contracts, pre-employment physicals, travel, overhead charges, and other non-labor expenditures as well as other small service contracts. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

3. Total outsourced contractor services expenditures:

Definition:

Include total amount spent on outsourced services for energy/utilities. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

3.a.Total annual expenditures for operating a district utility system:

Definition:

Include all expenditures associated with operating a campus district utility system (also known as a central energy system containing a boiler/heating plant and chiller/cooling plant which serves multiple buildings on campus). The alternative to this would be to install separate units in each building for example. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

Total

4.6.3. Total expenditures entered as a lump sum total:

Definition:

The sum of in-house labor (including benefits), in-house non-labor expenditures, and contract/outsourcing expenditures. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

4.6.4. Energy/Utilities Consumption (MMBTU) and Purchased Utilities Questions

MMBTU is a direct entry field. We encourage you to complete the MMBTU Calculation Worksheet in the previous section. If you do not enter a value in the MMBTU field below, you must complete the worksheet.

Total energy consumption in MMBTUs (million BTUs):

Definition:

This entry is a conversion of commonly used units of energy into British Thermal Units (BTUs) so that comparisons can be made on total energy consumption.

FAQ:

Question: We receive our natural gas using dekatherms. What is the conversion for that in MMBTUs?

Answer: 1 dekatherm = 10 therms = 1 MMBTU ~ 1 MCF or one dekatherm equals ten therms, which equals one million BTU's, which approximately equals 1000 cubic feet.

Question: Our water consumption is recorded in CCF. We have boilers and chillers but I have no way of tracking the steam or chilled water consumption. We track our water usage (purchased from the Water Department of our city). On the same bill, we have sewer charges. On separate bills, we pay for water run-off for all our parking lots. Do you have any insight on what I need to provide on the MMBTU Usage Calculation Worksheet or if we should even report our water as part of the survey?

Answer: Water and steam are methods for moving energy and do not need to be measured. The MMBTU calculations come from electric, fuel, oil, and natural gas consumed by the plants making steam and chilled water. The water bills have nothing to do with the MMBTU calculations.

Question: For our school's MMBTU usage, our auxiliaries are on the same meters as the rest of the school. How do you recommend that we split the numbers for part two in the MMBTU Usage Calculation Worksheet?

Answer: If the auxiliaries do not have their own meters, we would recommend dividing the total consumption by the total GSF/GSM for auxiliaries and then apply the cost per GSF/GSM factor to this auxiliary GSF/GSM.

Contact Person for MMBTU Data Scrubbing Questions:

Definition:

Please enter the name, e-mail, and telephone number of the person who can field questions about MMBTU, cogeneration, and other energy/utilities topics.

Contact Person's Email Address:

1. Total annual purchased utilities expenditure (including water and sewer):

Definition:

Include the expenditure for electricity, natural gas, propane gas, and all fossil fuels used for heating, cooling, lighting and equipment operation. Include water and sewer.

1a. **Total annual purchase for water and sewer expenditures that was included above:**

Definition:

Purchased utilities will normally include expenditures for water and sewer services. Water and sewer is removed from purchased utilities for comparing energy efficiency expenditures to purchased utility expenditures.

4.6.5. **Energy/Utilities benefit entered as a percent of salary (Enter as a whole number):**

Definition:

Total energy support benefit cost (insurance, retirement, etc.) excluding the cost of sick leave and vacation. This percentage may be available from the institution's Human Resources Department or Budget Office.

FAQ:

Typically, the benefit percentage will vary by facilities job description or department and the benefit percentage is generally larger for lower salaried employees.

TIP:

Benefits are a percentage of total in-house labor expenditures. To determine the benefit percentage, calculate what portion (percentage) of your reported total in-house labor expenditures represents benefits.

4.6.6.

Energy/Utilities Full-Time Equivalent (FTE) Questions

Definition:

The sum of in-house and full service contractor FTEs performing energy/utilities functions. (Refer to Energy/Utilities Costs and Staffing Definition at the top of this module). [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific buildings or a section of the campus in which they administer all facilities energy/utilities functions, enter the contractor FTE. If a significant service is provided by the contractor such as energy management controls system oversight, include the contractor FTE. If a minor service is provided by the contractor such as chiller maintenance, DO NOT include contractor FTE.

Example: Campus A has 3 in-house FTEs to provide energy/utilities services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 333,333. However, a significant service such as the energy management controls system is outsourced. The contractor provides 2 FTEs to service this function. Total FTEs for campus A is 5. GSF/GSM per FTE equals 200,000. By eliminating the 2 contractor FTEs, we have underestimated the amount of resources supporting the energy/utilities function.

1. **Total Energy/Utilities in-house staffing FTEs:**

Definition:

Regular staff or full-time equivalent (FTE) employees. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

2. **Total student FTE employees included above:**

Definition:

Student full-time equivalent (FTE) employees included in the In-house FTEs above. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

3. **Total district utility system FTEs included above:**

Definition:

District utility system (or central energy system) full-time equivalent (FTE) employees included in the total FTE count. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

4. **Energy/Utilities contractor FTEs:**

Definition:

The sum of full service contractor FTEs exclusively performing energy/utilities functions. (Refer to Energy/Utilities Costs and Staffing Definition at the top of this module). **In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.**

If you entered GSF/GSM exclusively serviced by contractor, you will need to ensure that your contractor FTE count is consistent with the contractor GSF/GSM reported above.

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific buildings or a section of the campus in which they administer all facilities energy/utilities functions, enter the contractor FTE. If a significant service is provided by the contractor such as energy management controls system oversight, **include** the contractor FTE. If a minor service is provided by the contractor such as chiller maintenance, **DO NOT** include contractor FTE.

Example: Campus A has 3 in-house FTEs to provide energy/utilities services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 333,333. However, a significant service such as the energy management controls system is outsourced. The contractor provides 2 FTEs to service this function. Total FTEs for campus A is 5. GSF/GSM per FTE equals 200,000. By eliminating the 2 contractor FTEs, we have underestimated the amount of resources supporting the energy/utilities function.

Total:

4.6.7. Energy/Utilities comments and notes for future reference:

Module 4.7.: OTHER Facilities Specific Services Questions

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Other Operations/Facilities Specific Services Operating Costs and Staffing Module:

- Include all costs associated with the operation and maintenance of any other service not previously addressed that falls within the purview of the facilities department exclusively.
- Some examples of additional services may include snow removal, trash removal, recycling, pest management, warehouse functions, special event (set up/tear down), motor pools/fleet transportation, moving, and storage.
- A checklist is provided for typical Other Facilities Specific Services as well as four spaces for any other facilities specific services not covered in the checklist.
- Do not duplicate services. If any of the services noted in the checklist below are covered in any other sections of Module 4, do not list them here.
- Include all in-house and contractor FTEs.

4.7.1.

Please select all the OTHER Facilities Specific Services included in this survey module. It is important to ensure that your reporting throughout this section is consistent with each area that you select below:

☐

Snow Removal

☐

Moving

☐

Trash Removal

☐

Storage

☐

Recycling

☐

IT/Technology

☐

Pest Management

☐

Warehouse Functions

☐

Special Event Set Up

☐

Motor Pool

☐

Other

☐

Other

☐

Other

☐

Other

4.7.2.

OTHER Facilities Specific Services GSF/GSM Questions

1. Total in-house and contractor GSF/GSM serviced by OTHER Facilities Specific Services:

Definition:

This data point is intended to capture the GSF/GSM of the campus served by Facilities Management in Other Facilities Specific areas. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

This data point is NOT intended to capture the GSF/GSM *occupied* by Facilities Management.

2. How much of the total GSF/GSM serviced above by OTHER Facilities Specific Services is outsourced?

Definition:

If a contractor exclusively performs Other Facilities Specific services for a portion of the campus, enter the GSF/GSM exclusively serviced by the contractor. (Refer to Other Facilities Specific Costs and Staffing Definition at the top of this module). *In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.*

FAQ:

Question: How do I figure out the GSF/GSM for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning company that cleans part of one building, etc.

Answer: None of these contracted tasks would be reported as outsourced GSF/GSM. You would only report the GSF/GSM for *full service* of a building or a large section of a building, but not just individual tasks or partial service. Having said this, if you wanted to become really sophisticated with your estimates, you would figure out the percent of total maintenance that elevator maintenance represents and report that amount of GSF/GSM as outsourced, but we don't recommend this process. The survey is asking for full service outsourced cleaning, maintenance, etc. of a whole area or building, not just the windows or the elevators etc.

TIP:

As an example, if a contractor is assigned specific buildings or a section of the campus to administer all Other Facilities Specific functions, enter the GSF/GSM serviced by the contractor but if a shredder truck is only contracted out for Other Facilities Specific services, **DO NOT** enter the GSF/GSM serviced by the contractor.

4.7.3.

OTHER Facilities Specific Services Expenditure Questions

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Total In-house labor expenditures (including benefits):

Definition:

Include all salaries, wages, and benefits. Include all miscellaneous salary categories. (e.g., overtime, shift differential, etc.). *In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.*

TIP:

A large, one-time settlement payment should be excluded because it is not comparable.

2. Total In-house non-labor and support expenditures:

Definition:

Include supplies, equipment, training, postage, uniforms, copier contracts, pre-employment physicals, travel, overhead charges, and other non-labor expenditures as well as other small service contracts. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

3. Total outsourced contractor services expenditures:

Definition:

Include total amount spent on outsourced services for Other Facilities Specific services. In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.

Total

4.7.4. Total expenditures entered as a lump sum total:

Definition:

The sum of in-house labor (including benefits), in-house non-labor expenditures, and contract/outsourcing expenditures. In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.

4.7.5. OTHER Facilities Specific Services benefit as a percent of salary (Enter as a whole number):

Definition:

Total other benefit cost (insurance, retirement, etc.) excluding the cost of sick leave and vacation. This percentage may be available from the institution's Human Resources Department or Budget Office.

FAQ:

Typically, the benefit percentage will vary by facilities job description or department and the benefit percentage is generally larger for lower salaried employees.

TIP:

Benefits are a percentage of total in-house labor expenditures. To determine the benefit percentage, calculate what portion (percentage) of your reported total in-house labor expenditures represents benefits.

4.7.6.

OTHER Facilities Specific Services Full-Time Equivalent (FTE) Questions**Definition:**

The sum of in-house and full service contractor FTEs performing Other Facilities Specific functions. (Refer to Other Facilities Specific Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: When should contractor FTEs be included? Answer: If a contractor is assigned specific buildings or a section of the campus in which they administer all Other Facilities Specific functions, enter the contractor FTE. If a significant service is provided by the contractor such as all public safety services, **include** the contractor FTE. If a minor service is provided by the contractor such as a shredder truck to be used on-site, **DO NOT** include contractor FTE.

Example: Campus A has 10 in-house FTEs to provide Other Facilities Specific services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 100,000. However, a significant service such as public safety is outsourced. The contractor provides 5 FTEs to service this function. Total FTEs for campus A is 15. GSF/GSM per FTE equals 66,666. By eliminating the 5 contractor FTEs, we have underestimated the amount of resources supporting the Other Facilities Specific function.

1. Total OTHER Facilities Specific Services in-house staffing FTEs:

Definition:

Regular staff or full-time equivalent (FTE) employees. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

2. Total student FTE employees *included above*:

Definition:

Student full-time equivalent (FTE) employees included in the In-house FTEs above. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

3. Total OTHER Facilities Specific Services contractor FTEs:

Definition:

The sum of full service contractor FTEs exclusively performing Other Facilities Specific functions. (Refer to Other Facilities Specific Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

If you entered GSF/GSM exclusively serviced by contractor, you will need to ensure that your contractor FTE count is consistent with the contractor GSF/GSM reported above.

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific buildings or a section of the campus in which they administer all Other Facilities Specific functions, enter the contractor FTE. If a significant service is provided by the contractor such as all public safety services, include the contractor FTE. If a minor service is provided by the contractor such as a shredder truck to be used on-site, include contractor FTE. Example: Campus A has 10 in-house FTEs to provide Other Facilities Specific services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 100,000. However, a significant service such as public safety is outsourced. The contractor provides 5 FTEs to service this function. Total FTEs for campus A is 15. GSF/GSM per FTE equals 66,666. By eliminating the 5 contractor FTEs, we have underestimated the amount of resources supporting the Other Facilities Specific functions.

Total:

4.7.7. OTHER Facilities Specific Services comments and notes for future reference:

Module 4.8.: OTHER Facilities NON-specific Services Questions

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Other Costs/Non-Facilities Specific Services Operating Costs and Staffing Module:

- Include all costs associated with the operation and maintenance of any other service not previously addressed that sometimes falls within the purview of the facilities department.
- Some examples of additional services may include security/public safety, environmental health/safety, mail services, and telecommunications.
- Space is provided for up to five additional services.
- Please put the names of Other Non-Facilities Specific services, if any, in the spaces provided.
- Include all in-house and contractor FTEs.

4.8.1. Please identify up to five OTHER Facilities Non-Specific Services included in this survey module. It is important to ensure that your reporting throughout this section is consistent with each area that you identify below:

Other

Other

Other

Other

Other

OTHER Facilities NON-Specific Services GSF/GSM Questions

1. Total in-house and contractor GSF/GSM serviced by OTHER Facilities NON-Specific Services:

Definition:

This data point is intended to capture the GSF/GSM of the campus served by Facilities Management in Other Non- Facilities Specific areas. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

This data point is NOT intended to capture the GSF/GSM *occupied* by Facilities Management.

2. How much of the total GSF/GSM serviced above by OTHER Facilities NON-Specific Services is outsourced?

Definition:

If a contractor exclusively performs Other Non- Facilities Specific services for a portion of the campus, enter the GSF/GSM exclusively serviced by the contractor. (Refer to Other Non-Facilities Costs and Staffing Definition at the top of this module).[In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

FAQ:

Question: How do I figure out the GSF/GSM for outsourcing? We have an elevator company that services our elevators; we have a vendor that power washes our buildings; a vendor that cleans the carpets sometimes; and a cleaning company that cleans part of one building, etc.

Answer: None of these contracted tasks would be reported as outsourced GSF/GSM. You would only report the GSF/GSM for *full service* of a building or a large section of a building, but not just individual tasks or partial service. Having said this, if you wanted to become really sophisticated with your estimates, you would figure out the percent of total maintenance that elevator maintenance represents and report that amount of GSF/GSM as outsourced, but we don't recommend this process. The survey is asking for full service outsourced cleaning, maintenance, etc. of a whole area or building, not just the windows or the elevators etc.

TIP: As an example, if a contractor is assigned specific buildings or a section of the campus to administer all Other Non-Facilities Specific functions, enter the GSF/GSM serviced by the contractor but if a shredder truck is only contracted out for Other Non- Facilities Specific services, **DO NOT** enter the GSF/GSM serviced by the contractor.

OTHER Facilities NON-Specific Services Expenditure Questions

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Total In-house labor expenditures (including benefits):

Definition:

Include all salaries, wages, and benefits. Include all miscellaneous salary categories. (e.g., overtime, shift differential, etc.). *In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.*

TIP:

A large, one-time settlement payment should be excluded because it is not comparable.

2. Total In-house non-labor and support expenditures:

Definition:

Include supplies, equipment, training, postage, uniforms, copier contracts, pre-employment physicals, travel, overhead charges, and other non-labor expenditures as well as other small service contracts. *In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.*

3. Total outsourced contractor services expenditures:

Definition:

Include total amount spent on outsourced services for Other Non-Facilities Specific services. *In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.*

Total

4.8.4. Total expenditures entered as a lump sum total:

Definition:

The sum of in-house labor (including benefits), in-house non-labor expenditures, and contract/outsourcing expenditures. *In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.*

4.8.5. OTHER Facilities NON-Specific Services benefit as a percent of salary (Enter as a whole number):

Definition:
Total other benefit cost (insurance, retirement, etc.) excluding the cost of sick leave and vacation. This percentage may be available from the institution's Human Resources Department or Budget Office.

FAQ:
Typically, the benefit percentage will vary by facilities job description or department and the benefit percentage is generally larger for lower salaried employees.

TIP:
Benefits are a percentage of total in-house labor expenditures. To determine the benefit percentage, calculate what portion (percentage) of your reported total in-house labor expenditures represents benefits.

4.8.6.

OTHER Facilities NON-Specific Services Full-Time Equivalent (FTE) Questions

Definition:
The sum of in-house and full service contractor FTEs performing Other Non-Facilities Specific functions. (Refer to Other Non- Facilities Specific Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

1.Total OTHER Facilities NON-Specific in-house staffing FTEs:

Definition:
Regular staff or full-time equivalent (FTE) employees. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year.

2. Total student FTE employees *included above*:

Definition:

Student full-time equivalent (FTE) employees included in the In-house FTEs above. [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

1 FTE = 1 person working 100% time for a full year. 0.5 FTE = 1 person working 50% time for a full year OR 1 person working 100% time for a half-year

3. Total OTHER Facilities NON-Specific Services contractor FTEs:

Definition:

The sum of full service contractor FTEs exclusively performing Other Non-Facilities Specific functions. (Refer to Other Non-Facilities Specific Costs and Staffing Definition at the top of this module.) [In the Registration module, you opted to include or exclude auxiliary services in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

If you entered GSF/GSM exclusively serviced by contractor, you will need to ensure that your contractor FTE count is consistent with the contractor GSF/GSM reported above.

FAQ:

Question: When should contractor FTEs be included?

Answer: If a contractor is assigned specific buildings or a section of the campus in which they administer all Other Non-Facilities Specific functions, enter the contractor FTE. If a significant service is provided by the contractor such as all public safety services, include the contractor FTE.

If a minor service is provided by the contractor such as a shredder truck to be used on-site, include contractor FTE. Example: Campus A has 10 in-house FTEs to provide Other Non-Facilities Specific services to 1,000,000 GSF/GSM. GSF/GSM per FTE equals 100,000. However, a significant service such as public safety is outsourced. The contractor provides 5 FTEs to service this function. Total FTEs for campus A is 15. GSF/GSM per FTE equals 66,666. By eliminating the 5 contractor FTEs, we have underestimated the amount of resources supporting the Other Non-Facilities Specific functions.

Total:

4.8.7. OTHER Facilities NON-Specific Services comments and notes for future reference:

Module 4.9.: Business Practices

Are the operating funds that my facilities department receives being spent in a manner that supports desired outcomes?

Business Practices Section of Module 4: The business practice measurements cover work orders, energy efficiency, construction management, down-time, and your self-evaluation of financial management and growth and learning practices.

4.9.1.

Work Order Questions

Cycle time is completion time minus the time the work order was received (arrived) in facilities based on a seven-day week and a 24- hour day. Cycle time, for the purpose of the survey, is the average length of time (hours rounded to the nearest hour) that it takes to complete routine maintenance service work orders. Do not include the length of time it takes to close out the work order request in the system. (i.e. Cycle time ends when the work is completed).

FAQ:

Question: Can you provide a precise definition for "on-hand"?

Answer: That phrase refers to materials or spare parts needed for work orders that are physically in place on site when the work order is received: e.g., in stock/in inventory. The distinction is made between work order cycle times when material is "on hand" versus cycle times when the material has to be looked up, ordered from a vendor, received and then assigned.

Question: We have talked to several managers about what they would do to convert works orders from a 8-hour, 40-hour week, to a 7-day week, 24-hour day. Our work order management system/software calculates work orders based on a 8-hour, 40-hour week.

Answer: We recommend taking a handful of closed work orders and, using a calendar, calculate the 7-day a week, 24-hour/day hours for this sample. Then take the system's calculation for the same batch and find the delta difference. Apply that difference to the system's calculation of lapsed time. This has to be an approximate estimate, it will not be an exact conversion.

TIP:

As an example, a reactive routine work order received at 9 am on July 30 and completed at 9 am on July 31 has a cycle time of 24 hours.

Select a time period long enough so that the results would be truly representative of the classification of work orders without being skewed by abnormal work schedules. Divide the work orders into those completed with materials on hand and those work orders that required purchase and receipt of materials. Calculate the cycle time for routine work orders that had materials on hand when the work orders were received and take an average from this group.

1. **Reactive routine maintenance work order AVERAGE cycle time in HOURS with materials on hand:**

Definition:

Reactive maintenance is unplanned maintenance, usually minor in nature, for repair or adjustment of building subcomponents or subsystems that have failed or been damaged.

2. Reactive routine maintenance work order cycle time in HOURS when *ordering and receipt of materials is required*:

Definition:

Cycle time is completion time minus the time the work order was received (arrived) in facilities based on a seven-day week and a 24-hour day. Cycle time, for the purpose of the survey, is the average length of time (hours rounded to the nearest hour) that it takes to complete routine maintenance service work orders. Do not include the length of time it takes to close out the work order request in the system. (i.e. Cycle time ends when the work is completed).

TIP:

As an example, a reactive routine work order is received at 9 am on July 30. Materials are ordered and received at 9 am on July 31. Work is completed at 9 am on August 1. Cycle time is 48 hours.

Select a time period long enough so that the results would be truly representative of the classification of work orders without being skewed by abnormal work schedules. Divide the work orders into those completed with materials on hand and those work orders that required purchase and receipt of materials. Calculate the cycle time for routine work orders received that required purchase and receipt of materials and take an average from this group.

3. Reactive routine maintenance work orders are what PERCENT of the total of reactive and preventive work orders? (Enter a whole number without percent sign):

Definition:

Preventive maintenance is a planned and controlled program of periodic inspection, adjustment, lubrication, and replacement of components, as well as performance testing and analysis, sometimes referred to as a preventive maintenance program. Preventive routine work orders are part of this program.

FAQ:

Question: Is this question asking for the total number of work orders, OPEN and CLOSED, for a specified timeframe?

Answer: Review all *assigned* work orders within the fiscal year.

Take the total of reactive routine and preventive maintenance work orders and determine what percent reactive routine work orders are of that total.

This question has nothing to do with whether or not the work order is open or closed.

TIP:

An example of a preventive maintenance work order would be fan lubrication. This is always a scheduled task.

4. Average age (HOURS) of reactive routine and preventive maintenance work orders:

Definition:

Average age reported in this survey will be the average length of time that all open routine maintenance service work orders have been in the work order system and remain uncompleted. It is the average time that has elapsed since each open work order was initiated to the present day or the date of the measurement. Base average age on a seven-day week and a 24-hour day.

5. Number of staff HOURS in backlog for completing open reactive routine and preventive maintenance work orders:

Definition:

The number of hours in backlog is the number of hours required for completing open work orders. The number of hours required for accomplishing all uncompleted work is calculated by totaling the estimated time that will be needed for every open work order transaction.

FAQ:

Question: I have 292 open work orders for the time frame I am using as my baseline for this section. I don't have estimated times for completing work orders. I do have average man-hours per work order (completed). If I use the average man-hours to compute the total staff hours for all 292 work orders to complete, the amount comes to 599 man-hours. Is this a good formula to use?

Answer: The method proposed is probably the best one to use.

TIP:

As an example, it's June 30, and it's the end of the fiscal year for Campus A. Open reactive routine and preventive work orders are captured from the work order system and total hours to complete all open work orders is 5,000 hours. 5,000 is then entered into the data field.

6. Total FTE assigned to reactive routine and preventive maintenance work orders:

Definition:

FTE is the number of staff who would normally be assigned to the performance of routine reactive and preventive work orders.

4.9.2.

Energy/Utilities Efficiency Question for 2019/2020

Annual energy efficiency expenditure dollars for the 2019/2020 fiscal year:

Definition:

Expenditures for all new, replacement or retrofit equipment, devices, and units that are either hard/flexible wired attached to a permanent fixed plant asset that can be justified by cost savings in energy usage over the life of the equipment installed or retrofitted. [In the Registration module, you opted to include or exclude auxiliary enterprises in ALL your survey entries. Ensure that this data point is consistent with that designation.](#)

TIP:

Energy conservation costs need to be expressed in dollar values spent in the given annual year for total energy conservation expenditures. This includes total labor, fringe benefits, supplies, transportation, and other special conditions for installation. Usually large, one-time energy reinvestment projects, that would otherwise distort comparisons to normal annual reinvestment amounts, can be averaged over several years or their payback period.

4.9.3. Capital Project Management Questions

Project soft actual costs, architecture and engineering costs, and adjusted total actual project costs have to originate from the same capital project(s). At a minimum, select one significant and representative capital project completed in fiscal year 2019-20 regardless of its start date. It is preferable to use a group of capital projects completed in the fiscal year (regardless of their start date) because a group provides more stable information for comparing performance from year-to-year in the future.

FAQ:

Question: Do these questions under Capital Project Management refer to state funded capital projects or operating capital projects, or a combination of both?

Answer: It can be either or both. You should be looking for projects that are representative of normal activity (as versus construction that is much easier or much more complex than normal). The questions relate to how you operate rather than how you operate based on funding.

1. Total project soft actual costs:

Definition:

Soft costs include such items as architecture, design, engineering, permits, inspections, consultants, environmental studies, and regulatory demands needing approval before construction begins. Soft costs exclude construction costs, telecommunications, furnishings, fixed equipment costs, and any other permanent components of the project. Report the amount expended to prepare and complete the non-construction needs of this/these project(s).

1a. Architecture and engineering actual **dollar** costs included in your total project soft actual costs response:

Definition:

Report the portion of actual soft costs reported above that represent total architecture and engineering actual costs.

2. *Adjusted* total actual project costs reported in your total project soft actual cost response:

Definition:

Report the total adjusted actual project costs for the same project(s) as reported in Project Soft Actual Costs above. Include the total cost to complete and close the project(s) excluding the equipment and furnishings costs. Include soft costs and construction costs.

2a. The dollar value of change orders as a **percent** of adjusted total actual project cost:

4.9.4. Work Down Time Question

Total hours of "Work Down-Time" which includes absences from the work place for holidays, vacation, sick leave, work-related injury leave, and other types of paid leave such as jury duty, military leave, personal leave, and maternity leave. Do not include non-productive hours while at the workplace.

Definition:

There are two ways to measure productivity. One is down-time and the other is up-time.

Down-time includes absences from the work place for holidays, vacation, sick leave, work-related injury leave, and other types of paid leave such as jury duty, military leave, personal leave, and maternity leave.

Up-time includes billable hours, meetings, training, and necessary work activities such as on-site travel time, equipment maintenance, storing equipment and supplies, evaluating customer requested work, preparing work estimates, etc.

Total annual holidays (days) taken per person:

Definition:

Record the number of days a staff person was off-work on paid status in recognition/celebration of holidays during the fiscal year covered by this survey (2019-20).

FAQ:

Question: How do we adjust the automatic calculation for annual holiday hours? The FPI Survey uses an 8 hour day, however, our institution's numbers are based on a 7.5 hour day. Our calculated amount is approximately 5,000 hours too high.

Answer: We normalize the data in the survey to a standard 8 hour day to maintain proper comparisons in the report. In these types of situations, we recommend that you adjust your holidays taken so that when normalized, the total hours taken for all FTE is accurate. For your situation, 11.25 days instead of 12 will give you an accurate number for total hours

Your reported total facilities FTE from Module 1:

4.9.5. Detailed Work Down Time Questions

1. Total annual hours sick leave taken by all facilities FTE:

Definition:

Enter the sum of all sick leave hours used (not accrued) by the facilities staff in the fiscal year reported (2019-20). Leave taken for work-related injuries is reported separately below.

FAQ:

Question: I have included FMLA (Family Medical Leave Act) sick leave hours in my total sick leave hours taken entry field. Should the FMLA/Parental leave hours be in the sick leave taken entry field or the Other leave taken entry field?

Answer: It depends on the type of leave taken. Typically FMLA is a reason for taking sick leave. The type of leave is sick and the reason is FMLA. You would want to put these hours in the sick leave taken entry field and not the Other leave entry field.

2. Total annual vacation hours used by all facilities FTE:

Definition:

Enter the sum of all vacation hours used (not accrued) by the facilities staff in the fiscal year reported (2019-20).

3. Total annual hours missed due to work-related injuries for all facilities FTEs:

Definition:

Follow the definition used by your institution for work-related injuries. Include hours while on leave of absence due to work-related injuries occurring in the fiscal year reported (2019-20).

4. Total annual hours of other leave taken by all facilities FTE:

Definition:

Examples are jury duty, military leave, personal leave, and maternity leave taken during the fiscal year reported (2019-20).

Total

4.9.6. Balanced Scorecard Self-Performance Assessment Question

This section contains four performance self-evaluations that cover financial management, internal processes, learning & growth, and customer satisfaction practices. The purpose of this section is to provide facilities professionals with descriptions of performance levels that are based on data driven management practices that produce cycles of continuous improvements.

Level 1 Copper (No Program) No systematic financial/internal process/learning & growth/customer satisfaction data collection program evident. Only anecdotal information is available on how well financial integrity and physical asset stewardship is satisfied.

Level 2 Bronze (Beginning Program) Beginnings of a systematic financial/internal process/learning & growth/customer satisfaction data collection program. May be tracking some indicators. Major gaps exist. Some primary indicators are not included. Early stages of a transition from reacting to problems to a general improvement orientation with noted results. Trends show some improvements and/or good performance is noted for some primary services.

Level 3 Silver (Mature Program) A sound, systematic financial/internal process/learning & growth/customer satisfaction data collection and evaluation program has been established to examine perspective objectives. Program collects and trends performance indicators for almost all service activities. A fact-based improvement process is in place for reducing costs/improving performance of most primary services. Emphasis is placed more on improvement than on reacting to problems. Improvements and cost savings can be measured and substantiated. Performance trends show cost or service improvement in many to most primary services. No adverse trends are noted. Some trends and/or service levels are evaluated against relevant comparisons or benchmarks from similar institutions. Results show areas of strength with good to very good relative service levels.

Level 4 Gold (Stretch Excellent Program) A sound, systematic financial/internal process/learning & growth/customer satisfaction data collection, evaluation, and refinement program has been established that documents results in satisfying perspective objectives. A fact-based improvement process is in place for reducing costs or improving services for all primary services. Cycles of improvement demonstrate a mature program of incremental improvements and refinements in making previous improvements even better. Performance trends show cycles of cost or service improvement in many to most primary services. Most improvement trends and/or performance levels are sustained over cycles of data collection. Current financial performance is good to excellent for most service activities. No adverse trends are noted. Most trends and/or service levels are evaluated against relevant comparisons or benchmarks from similar institutions. Results show areas of leadership with very good relative service levels.

Level 5 Platinum (Flawless Program) A sound, systematic financial/internal process/learning & growth/customer satisfaction data collection, evaluation, and refinement program is fully established that accomplishes overall financial perspective objectives. Program collects performance indicators for all primary services. Specific services within broader primary services are being evaluated for individual service centers (lock shop, sign shop, zones, plumbing, etc.) and are making improvements. A strong fact-based improvement process is fully in place for reducing costs or improving services for all primary services. Emphasis is placed on refinement of previous improvements to make them even better. Cycles of improvement demonstrate a mature program of continuous improvements and refinements in primary services and have been sustained over several years. Current performance is excellent for most primary services. No adverse trends are noted. Most trends and/or service levels are evaluated against relevant comparisons or benchmarks from other similar institutions. Some are benchmarked with outside industries. Results show areas of leadership with excellent relative service levels.

	Level 1 Copper No Program	Level 2 Bronze Beginning Program	Level 3 Silver Mature Program	Level 4 Gold Stretch Excellent Program	Level 5 Platinum Flawless Program
Financial Performance Self- Evaluation level:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internal Processes Performance Self- Evaluation level:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Level 1 Copper No Program	Level 2 Bronze Beginning Program	Level 3 Silver Mature Program	Level 4 Gold Stretch Excellent Program	Level 5 Platinum Flawless Program
Learning & Growth Performance Self- Evaluation level:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer Performance Self- Evaluation level:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4.9.7. Business Practices comments and notes for future reference:

Module 5: Is My Institution Making the Right Investments?

Is my institution making the right investment in our existing buildings, infrastructure, and academic programs?

The purpose of this section is to construct measurements that indicate financial integrity and stewardship associated with the operation and preservation of physical assets throughout the campus. Strategic financial measurements are essential for data driven planning and budgeting of resources for facilities operations and capital projects.

5.1.

Building Useful Life Question

Building's useful life (in years):

Definition:

Building's useful life in years is the average number of years your campus buildings are expected to support academic programs. This assumes adequate maintenance, renovation, modernization, adaptation, etc., before being replaced.

TIP:

For historic buildings, include the average number of estimated years that elapse between major renewals of historic buildings.

5.2.

Investment Need Questions

1. Capital renewal/deferred maintenance need:

Definition:

The amount currently required over and above facility maintenance operating budget expenditures, to sustain or return the physical plant to a reliable operating condition for its present use.

TIP:

This dollar amount is over and above normal maintenance for items with a life cycle in excess of one year and is not normally contained in an annual facility operating budget. CAPITAL RENEWAL NEED INCLUDES THOSE ITEMS THAT ARE INCLUDED IN THE DEFERRED MAINTENANCE BACKLOG.

Deferred maintenance is work that has been deferred on a planned or unplanned basis to a future budget cycle or postponed until funds become available. Include expenditures for the total dollar amount of existing major maintenance repairs and replacements identified by a comprehensive facilities condition audit of buildings, grounds, fixed equipment, and infrastructure needs.

2. Renovation, modernization, and adaptation cumulative need:

Definition:

An estimate of the amount required for the addition or expansion of facilities by work performed to change the interior alignment of space or physical characteristics of an existing facility so that it can be used more effectively, be adapted for new use, or comply with existing codes. This estimated amount is required to meet the evolving technological, programmatic, or regulatory demands of the campus.

TIP:

Most campuses have a good estimate of their Capital Renewal Deferred Maintenance backlog but have only a vague estimate of their Renovation, Modernization, and Adaptation backlog number.

Total:

5.3. Investment Expenditure Questions for Existing Space

If you prefer to enter your expenditures as a lump sum total, please enter the total below this question.

1. Capital renewal/deferred maintenance investment/expenditures:

Definition:

The current fiscal year (2020-21) capital renewal expenditures made to retire a portion of the deferred maintenance and capital renewal needs.

FAQ:

Question: I have a question about capital renewal expenditures. Does the question ask what portion of the capital expenditures were SPENT to remedy part of the deferred maintenance and capital renewal needs, or what is NEEDED to remedy? In other words I NEED \$8 million, but I only received/spent \$4 million.....

Answer: You will want to only list those expenditures for capital renewal and deferred maintenance that you actually spent. Your Needs Index calculation below should reveal what you actually need.

2. Renovation, modernization, and adaptation investment/expenditures:

Definition:

The fiscal year 2020-21 expenditure for the addition or expansion of facilities by work performed to change the interior alignment of space or physical characteristics of an existing facility so that it can be used more effectively, be adapted for new use, or comply with existing codes. This expenditure is required to meet the evolving technological, programmatic, or regulatory demands of the campus.

3. Capital investment/expenditures replacing existing space:

Definition:

Major capital expenditures for replacement of existing space during the 2020-21 fiscal year.

4. Capital investment/expenditures that expand or create new spaces:

Definition:

Major capital expenditures disbursed for expanded or new campus space during the 2020-21 fiscal year.

Total

5.4. **Total capital investment/expenditures in existing space entered as a lump sum:**

Definition:

This value represents the sum total of capital renewal deferred maintenance expenditures, renovation, modernization, and adaptation annual expenditures, as well as capital expenditures for major campus capital projects replacing existing space during the 2020-21 fiscal year.

5.5. What role does the "Total Cost of Ownership" investment model play in your institution's asset investment strategy?

Level 1

Level 2

Level 3

Level 4

Level 5

Definition: The Total Cost of Ownership investment model uses a holistic approach to determine asset management realities found at every educational institution. The TCO framework has three central components:

1) Birth and Burial which are non-recurring costs such as concept to bid, financing, construction/install, and finally decommission/demolition/disposal. 2) Operations and Maintenance which are annual recurring costs such as operations, planned/routine maintenance, repairs/breakdowns, and utilities. 3) Recapitalization which is a periodic recurring cost such as retrofits/improvements, programmatic upgrades, and replacement/renewal. Use this framework above to determine your level of current investment in your institution's greatest asset: the buildings.

5.6. Needs Index Questions

If your institution has a strategy for reducing your Needs Index percentage, what Needs Index percent are you trying to achieve?:

Definition:

The Needs Index is a percentage computed as a sum of capital renewal/deferred maintenance, renovation, modernization, and adaptation cumulative need divided by current replacement value (CRV). If your campus has a strategy to reduce the Needs Index percentage, enter the targeted percentage goal.

What would be a reasonable number of years for reaching a reduced Needs Index goal?:

Definition:

The number of years estimated to go from the present Needs Index percentage of CRV to the goal of a reduced Needs Index percentage of CRV.

5.7. Is My Institution Making the Right Investments comments and notes for future reference:

Module 6: Customer Satisfaction Survey

Are the customers satisfied with the space and service?

- APPA recommends that every institution "check the pulse" of its institution on an ongoing, yearly basis.
- The purpose of this section is to collect statistics and responses that will assist you in assessing the degree to which your organization is directed toward customer satisfaction.

6.1. Select the overall customer satisfaction level that applies to your entire facilities management department:

Definition: The customer satisfaction index is the overall average of all questions answered by all customers. (Sum of all answers divided by the count of all answers.)

1- Extremely satisfied	2- Very satisfied	3- Satisfied	4- Dissatisfied	5 - Very dissatisfied	6- Extremely dissatisfied
------------------------------	-------------------------	-----------------	--------------------	-----------------------------	---------------------------------

6.2. Distribution Index

Indicate the percent of customers whose overall customer satisfaction score averages were in the ranges below. Enter whole numbers without a percent sign. The total must equal 100:

FAQ:

Why do you ask for the distribution information? The distribution entries are used to calculate the High Score Index, the Low Score Index, and the box ratio. The distribution also can be used to calculate the overall satisfaction level.

Extremely satisfied:

Very satisfied:

Satisfied:

Dissatisfied:

Very dissatisfied:

Extremely dissatisfied:

Total

6.3. Customer Satisfaction comments and notes for future reference:

Module 7: Employee Customer Satisfaction Survey

Is my facilities department developing staff that can sustain excellence?

- APPA recommends that every institution "check the pulse" of its Facilities Management department on an ongoing, yearly basis.
- The purpose of this section is to collect statistics and responses which will assist you in assessing the degree to which your organization is directed towards creating a high-performance workplace and a learning organization.

7.1. Select the overall employee satisfaction level that applies to your entire facilities management department:

Definition: The employee satisfaction index is the overall average of all questions answered by all employees. (Sum of all answers divided by the count of all answers.)

1- Extremely satisfied	2- Very satisfied	3- Satisfied	4- Dissatisfied	5 - Very dissatisfied	6- Extremely dissatisfied
------------------------------	-------------------------	-----------------	--------------------	-----------------------------	---------------------------------

7.2. Distribution Index

Indicate the percent of employees whose overall employee satisfaction score averages were in the ranges below. Enter whole numbers without a percent sign. The total should equal 100:

FAQ:

Why do you ask for the distribution information? The distribution entries are used to calculate the High Score Index, the Low Score Index, and the box ratio. The distribution also can be used to calculate the overall satisfaction level.

Extremely satisfied:

Very satisfied:

Satisfied:

Dissatisfied:

Very dissatisfied:

Extremely dissatisfied:

Total

7.3. Annual mandatory & elective on-shift training hours PER FTE (Do not multiply total hours by all FTEs):

Definition:
Report training occurring during normal shift hours, but exclude on-the-job training which occurs while work is performed. On-shift refers to the normal hours per day for the normal work days per week. Off-shift refers to hours before or after the normal hours per day, weekends, and holidays.

TIP:
Exclude training electively taken by employees on their own initiative and expense during off-shift hours. Include training during work hours for which the employee stays on pay status even if the employee pays tuition costs. If attendance at a professional meeting is considered educational, include the on-shift time (normal hours per day on work days of the week) while in attendance at the meeting or on travel status to and from the meeting. Exclude travel time or meeting time occurring before and after normal shift hours and on weekends.

1. Annual hours PER FTE of on-shift required/mandatory training:

Definition:
Training mandated or required by any governmental or licensing agency, or campus department pertaining to facilities employees. Include training mandated by facilities.

2. Annual hours PER FTE of on-shift elective training:

Definition:
Training which is not required or mandated.

Total:

7.4. Percent of facilities open positions filled by internal candidates within the facilities department:

Definition:
Calculate the percent by taking the number of positions filled by internal candidates and dividing this number by total positions filled during the fiscal year 2020-21. An opportunity to recruit internal and external candidates must have occurred to be counted. Opportunities occur when a person retires, resigns, or is laid off and their position will be refilled, or when a new position is added to the staffing.

TIP:

Opportunities DO NOT occur when there is no opportunity to recruit. An example may be when a person is reclassified for performing work that has evolved/grown in responsibility or scope. An example of the latter sometimes occurs during downsizing when a position is eliminated and the work is distributed to existing staff or when new software changes the manner in which work is performed.

7.5. Employee Customer comments and notes for future reference:

Module 8: Sustainability Key Facilities Metrics

- The Key Facilities Metrics survey and report, introduced in 2013 as a collaboration between APPA and NACUBO, helps raise a campus' consciousness over several basic key facilities metrics.
- Our goal is for campus finance and facilities professionals to be in alignment on a handful of important annual consumption metrics: Energy (BTU), electrical, water, waste stream output, and carbon footprint.

8.1. Institution's annual water use in US gallons:

Definition:

Total water consumed in US gallons (as recorded). Note estimate of surface or groundwater or grey water or rainwater harvested reuse.

8.2. Electricity consumed in kilowatt hours:

Definition:

Electrical energy measured in kilowatt hours which should include imported electricity (from the grid or PPA) and self-generated electricity (on-site renewable electricity and on-site CHP electricity production).

8.3. Recycling waste in US (not metric) tons:

Definition:

Materials recycled includes municipal solid waste (MSW) diverted through recycling, composting, donation or sale, and residual conversion (thermal, chemical, mechanical, and/or biological processes capable of converting post-recycled residual solid waste into useful products and chemicals, green fuels like ethanol and biodiesel, and clean, renewable energy). Exclude construction and demolition (C&D) waste and hazardous waste.

8.4. What is included in your "materials recycled" waste?

- ☐ Single stream / zero-sort recycling (bottles, cans, paper, cardboard, etc.)
- ☐ Compost (food and/or yard waste)
- ☐ Residual conversion (gasification or other treatment of post-recycling material)
- ☐ Donations (clothing, household items, furniture, etc.)
- ☐ White goods recycling (large appliances)
- ☐ Electronics waste recycling (e-waste)
- ☐ Mattress recycling
- ☐ Other _____

8.5. Garbage (solid) waste in US (not metric) tons:

Definition:

Municipal solid waste (trash) disposed through landfilling or incineration. Exclude construction and demolition (C&D) waste and hazardous waste.

8.6. If tons of garbage or recycling is not known, indicate the percentage diverted from landfills (i.e., compost/recycle). Enter a whole number without percent sign; e.g., 30 but not .30 or 30%.

8.7. Greenhouse gas emissions - Total MTCO₂e from Scopes 1 and 2:

Definition:

Scope 1 sources include: stationary sources, e.g. coal, gas, oil, biomass and other fuels; direct transportation sources, e.g. fleet vehicles; refrigerants and chemicals; fertilizer application and animal husbandry. Scope 2 sources include: purchased electricity, steam and chilled water.

8.8. Please select the campus method used to calculate carbon footprint: (Select only one option)

- ☐ Our campus has completed a thorough analysis of the campus carbon footprint.
- ☐ Our campus utilized a simple methodology (without third party analysis) such as the [University of New Hampshire's "SIMAP" platform](#).
- ☐ Our campus may elect to multiply their MMBTU by the natural gas factor of 0.0053 MTCO₂e per therm / 0.0531 MTCO₂e per MMBtu and the purchased electricity of 0.0004 MTCO₂e per kWh.
- ☐ Our campus elected not to utilize any of the above calculation methods and skipped the question.

Congratulations! You have reached the end of the 20-21 FPI Survey. We ask that you click NEXT only when you are certain you have completed all the survey questions you intend to submit. If you do not feel certain that you are ready to submit this survey, please go back to the Table of Contents and complete any additional sections you need to finalize.

By clicking the NEXT button, you are acknowledging that you are ready for one final review of all your questions before reaching the FINAL SUBMIT area. Please proceed and review your data one final time before clicking the FINAL SUBMIT menu option which will be located at the bottom of the Table of Contents in the FINAL SUBMIT area. You will have the ability to download/print your survey responses once you submit but you will no longer be allowed access to the survey.

