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1/1/2012

GUIDE FOR DEVELOPING PROGRAM STATEMENTS

for Projects Requiring Enumeration

CONTENTS

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i. INTRODUCTION

The success of any building or facility project's scope, budget, schedule, and quality is largely attributed to the effort on developing the Program Statement. The Program Statement is written during the Pre-Design Phase.

This guide augments the following DSF documents:

1) **"Guide for Preparation of the Program Statement"**

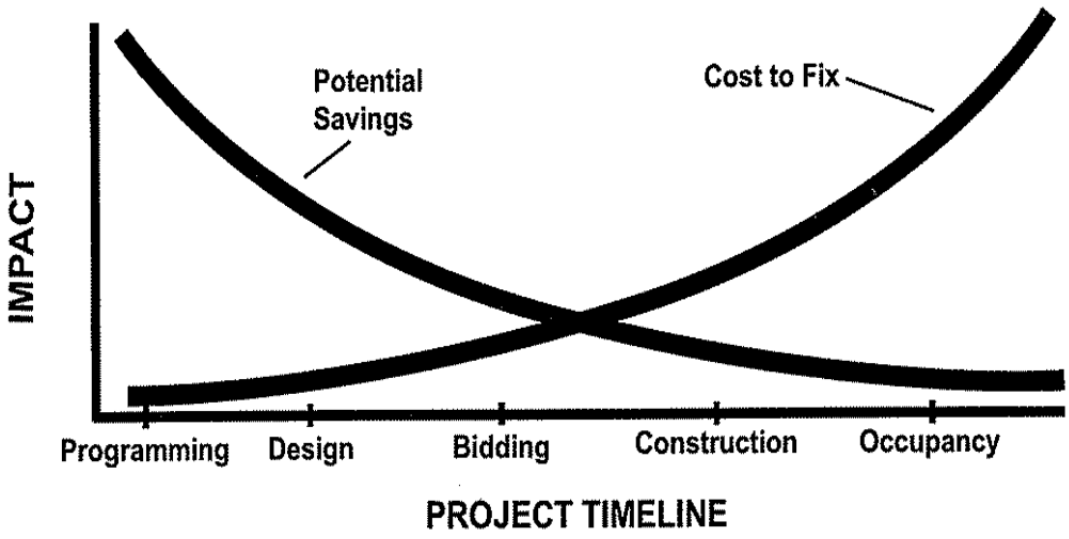
2) **"Policy and Procedures Manual for Architects/Engineers and Consultants", section 3.C.**

3) **"Manual for the Preparation of Capital Budget Requests"**

4) **"Capital Budget Cost Estimating Guidelines".**

This document contains most of the tools you need to develop the Program Statement.

Decisions / Actions that lead to Optimal Results and Potential Cost Savings
Vs.
Decisions / Actions that lead to Costs to Fix and Disruption



A. PROGRAMMING BACKGROUND

"PROGRAM STATEMENT" DEFINED

During the Pre-Design phase for a building or facility, the Program Statement is developed. Developing the Program Statement is accomplished by a methodical "programming" process which begins by 1) seeking out and identifying the root problem or major deficiencies of the user/agency's program, 2) learning the core values, 3) then establishing the vision and main goals that can correct those problems or deficiencies, 4) then performing a detailed analysis of the user/agency's operational, programmatic, aesthetic, environmental, and physical needs, and 5) then making a clear and defensible description of the necessary operational, programmatic, aesthetic, environmental, and physical solutions to support those goals and needs.

The programming process culminates in a written document called the "Program Statement". Summarized, the Program Statement is generally divided into three major categories: 1) it documents where you are now, 2) it documents where you want to go, and 3) it documents the solution to get you there.

There are several commonly used terms, which generally mean the same as "Program Statement".

Term	Where Used
"Pre-Design" document (Pre-Design Phase):	Some State Agencies
"Program Statement" (Programming Phase):	American Institute of Architects, DSF
"Owner's Project Requirements" (OPR):	Commissioning Industry

REASONS TO WRITE THE "PROGRAM STATEMENT"

1. For the agency's benefit, in conjunction with the agency's biennial Project Request document, the Program Statement helps communicate to DSF and the State of Wisconsin Building Commission (SBC) the purpose, scope, schedule and budget of the proposed project or facility in which to obtain funding. If the Program Statement is written for a "Small Project" or a larger "All Agency Project", then it is used to obtain funding and "authority to construct".

2. For the agency's and DSF's benefit, the Program Statement communicates to the A/E/Consultant the background, scope, and information necessary to begin design work and helps serve as a basis for calculating A/E fees for professional services for the design and construction phases.

3. To achieve optimum program efficiency and facility performance, the programming process will lead the agency in determining their actual (not perceived) needs by analyzing the requirements for their activities, room adjacencies, equipment, and supporting environmental systems. The A/E takes the Program Statement and translates those requirements into design plans and eventually into construction plans and specifications.

4. Programming involves an intimate collaboration between user/agency and A/E/Consultant. The A/E/Consultant wants to understand how the user/agency program so they can help the agency maximize efficiency and human productivity.

5. The Programming process determines most cost and scope items and exposes the true viability of a project. This becomes the transition to the design phase. During the design phase costs are further developed and in some cases, the scope may need to be adjusted to meet a budget which was determined in the programming phase.

6. A comprehensive Program Statement provides an invaluable checklist for the A/E during the design phase in order to not miss details. Proper investment of time and resources in the Program Statement helps minimize everyone's time and costs later in the design phase. This old adage applies: "Plan the work, then work the plan."

STATE BUILDING COMMISSION"S OBJECTIVE RELATED TO PROGRAM STATEMENTS

Throughout the programming phase, all team members should be cognizant of the message prescribed in the Wisconsin State Building Commission Policy and Procedures Manual.

> "Each construction project shall be designed to achieve the maximum effectiveness and efficiency in cost, function and energy consumption. It shall also be designed to achieve the maximum compatibility with the mission of each institution or facility, permit access and use by persons with disabilities, and protect the natural environment."

B. TASK LIST for DEVELOPING the "PROGRAM STATEMENT"

Key Steps to Ensure Successful Programming and Master Planning for a Building(s)

• **Bold** tasks below are applicable to all projects or facilities.
• Non bold tasks are dependent on size and complexity
• Depending on the project, some tasks run concurrent with each other or can be combined.

Project: _____
Location:_____
DSF No: _____

TASK LIST

1 ____Organize Core Team (before the A/E/Consultant Interview)
2 **____Set Up Building Committee, if different from Core Team.**
____Set up Focus (User) Groups and other Groups if needed
3 ____Initial Project Meeting (Project Kick-off Meeting to launch the entire project for key stakeholders)
4 **____Programming Planning Meeting With Core Team**
5 ____Initial Assessment of Scope, Budget, Schedule for Building and Site
6 ____Contract and Fee Negotiation
7 ____Develop Work Plan: Major Tasks, Meeting Schedules, Attendees, draft Table of Contents
8 ____Educational Meeting for Core Team members, Building Committee members, & other groups if needed
9 ____Schedule Core Team Meetings and standard Agenda, If required Schedule Executive update meetings
10____Schedule Building Committee Meetings and standard Agenda, if a Building Committee was set up
11____Distribute and Complete "Program Statement Checklist" (See Section D)
12____Collect and Analyze Operations and Program Data of the Agency
13____Collect and Analyze Physical Data
14____Collect Regulatory Requirements (City, County, State, Federal)
15____Select members for Focus Groups and/or Surveys
16____Develop questions posed to Focus Groups and Other Groups
17____Critique questions to elicit the most meaningful responses
18____Put questions into priority order
19____Schedule Specific Days/Times for Focus Groups for Workshop (see Work Plan above)
20____Distribute Focus Group questions in advance of Workshops
21____Workshop 1: Core Values, Visioning, (Experience Audit if renovation), major goals
22____Workshop 2: Activities, functions, ways of doing business
23____Survey Focus Groups and Building Committee on performance of Workshop 1 and 2
24____Conduct Observations and Personal Interviews with User/Focus Groups
25**____Benchmarking Tours: virtual, on-site, and off-site (task done sooner on small projects)**
26____Workshop 3: Detailed information gathering (including headcounts) from depts, work units, etc.
27____Workshop 4: Detailed information gathering from secondary support groups: physical plant, safety, security, sustainability, parking/transportation, information technology, haz mat, etc.
28____Workshop 5 and 6: compilation of all data collected and/or presentation of summarized data meaning
29____Continuing meetings, Workshops, tasks, as needed
30____Develop Space Tabulation: Existing and Proposed rooms for all Occupants/Users/Agency
31____Develop Adjacency Matrix
32____Develop Graphic Space Analysis (Diagram of all rooms and spaces by relative size)
33____Develop Project Budget and Schedule
34____Develop "Bubble Diagrams" or Block Diagrams (and Stacking Diagrams for vertical expansion)
35____For renovation projects, test room/space sizes to determine if spaces fit into the existing building
36____Room Data Sheets
37____Equipment Schedule: Movable, Fixed, Special
38____Develop design criteria and measures or metrics to ensure project success
39____Review draft Program Statement
40____Program Statement sign-off; end of Programming Phase

41____Education / Kick-off Meeting for Design Phase: usually necessary for very large projects

TASK LIST EXPLAINED

("Tasks" below correspond to the "Task List" on the previous page and can also be used to develop a Work Plan)

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
1 - Organize Core Team	**Purpose:** **• Establishes membership from each major constituency: DSF, Agency Central, Institution, User group, A/E/Consultant** **• Establishes final decision making body to expedite project activities**	**Shared**	
2 - Set-up Building Committee (i.e., user group committee)	Purpose of Committee: • Management level Representatives from each major department and stakeholder group, who have a solid knowledge of operations and are good at communicating back to constituents • Keep pulse of all departments • Help make decisions for their constituents	Agency, Institution, with DSF and A/E/Consultant assistance	
3 - Initial Project Meeting/Project Kick-off Meeting	**Purpose:** **• Introduce all vested parties, identification of rules and regulations which govern state projects, review general scope, budget, schedule, etc** **• Communication must be open: all core team members must receive all communications. DSF, via the DSF Project Manager, gives final direction to the A/E/Consultant**	**DSF Led, attended by Agency Reps Institution Reps, User Reps, A/E/Consultant team leaders**	**#1 Example: Agenda – per DSF PM manual**
4 - Planning Meeting With Core Team	**Purpose:** **• Establish repoire with team leaders,** **• Learn expectations of user group and A/E/Consultant interface,** **• Discussions of Building Committee membership, focus groups, and meetings** **• Educate core team of entire process** **• Agree on general approach to Workshops**	**DSF Led, Attended by core team members from Agency and Institution and principal A/E/Consultant**	**#2 Example: Agenda** **# 7 Example: Project Communications Protocol**
5 - Initial Assessment of Scope, Budget, Schedule for Building and Site	Purpose: Quick check to help understand the enormity or simplicity of the project and to point out any glaring discrepancies with the preliminary estimate for scope, schedule, and budget. Note: This applies only if the Agency/DSF has provided the A/E/Consultant with preliminary programming information.	A/E/Consultant	None: Primarily for A/E/Consultant use only
6 - Contract and Fee Negotiations	**• The kick-off meeting usually offers the A/E/Consultant one more opportunity to obtain more information about the scope, schedule and budget on which to develop a fee proposal.** **• DSF PM should discuss general approach to the programming phase and ascertain programming skills of A/E/Consultant team**	**A/E/Consultant and DSF**	**A/E/Consultant Contract**

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
	• No work by A/E/Consultant until contract is signed.		
7 - Develop Work Plan for developing the Program Statement	**Work Plan shall contain:** **1. Matrix indicating** **a. Major Tasks** **b. Schedule for meetings and attendees - Core Team, Building Committee,** **Workshops/sessions/interviews with focus groups, and other project meetings, usually a bi-weekly meeting,** **d. Tours for benchmarking** **2. Draft Table of Contents for a Program Statement** **• Review with agency group**	**A/E/Consultant with DSF assistance. May be in conjunction with the A/E/Consultant proposal for services**	**#3 Example: "Work Plan" for Developing the Program Statement**
8 - Educational meeting for Building Committee and other interested committees/groups	Purpose: • Recognize that this is probably the first state building project for many members in the agency group. Provide: a. Overview of the entire process including design and construction phases, b. Programming process, c. Contents of the Program Statement, d. Explain expectations of the Building Committee and outcomes of various steps along the programming process, e. Remind the building committee that this is a public sector project and it needs to be open to all people affected by the project. f. Alert them that politics typically occur over the course of the entire project and remind them that openness tends to defuse politics.	A/E/Consultant led or DSF led	#4 Example: Program Statement Title / Sign-off Page #5a,b, c Example: Table of Contents
9 - Schedule Core Team Meetings	**Purpose:** **• For reporting and discussing issues and past Project meetings, and for preparation for future Project Meeting** **• Develop standard Agenda** **• Biweekly or as needed**	**Agency, Institution, User Group, DSF, A/E/Consultant**	**#6 Example: Core Team Agenda**
10 - Schedule Building Committee meetings	Purpose: • Major programming and design meetings • Develop standard Agenda • Usually biweekly Smaller projects may not need this committee and meetings	Institution, A/E	
11 - Distribute "Checklist for the Program Statement"	**Purpose:** **Encourages all stakeholders to think about the breadth and depth of what the future facility will entail.**	**A/E/Consultant, DSF, Institution**	**Completed Checklist**

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
12 - Collect and Analyze Operations and Program data:	**Purpose:** **Learn and understand the Occupant/ Users' statutory "core" functions, operations, and program because land and facilities are acquired and built to support the statutory "core" functions, operations, and program.** **Perform Internal operations study:** **1. Organization/Unit General:** **a. Mission/Vision Statements** **b. Strategic Plan, Academic Plan** **c. History of organization/unit or institution** **2. Organizational structure:** **a. Occupant/User Organization Chart** **b. List of all work units and their primary functions** **3. Human resources:** **a. Occupant/User counts: employees (FTE, LTE), student workers (PAs, RAs, TAs, and part-timers), physical plant, security staff, patients, inmates, visitors, community members, etc.** **b. If the Agency is the UW: Enrollment-headcount, credit hours, no. of hours that seats are occupied, Utilization-classroom and laboratory hours of use and % station utilization, Class section sizes compared with room capacities (the mix) of students (FTE, HC), classroom utilization, section sizes** **4. Products/Services:** **5. Financial data:** **a. Revenues (GPR, PR, annual research grants, gifts, and other income), expenses,** **b. Expenses** **c. Operating budgets,** **d. Financial growth projections** **6. Future Operations/Programs Plans**	**Institution provided for A/E/Consultant use**	
13 - Collect and Analyze Physical data:	**Purpose:** **To provide foundation on which to determine physical solutions to support operational and programmatic needs** **1. Landholdings and Boundaries:** **2. Exterior Space:** **a. Site plans, site surveys, utility and services plans,** **b. Landscaping and topography plans,** **c. Soil and geotechnical data and**	**A/E/Consultant**	**#18 Exhibit: Space Tabulation: Existing and Proposed**

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
	borings **3. Transportation and circulation** **4. Utilities and Services** **5. Building Space** **a. Existing building condition** **b. MEP data** **c. Create Existing Space Tabulation, which lists all assignable and non-assignable spaces and create corresponding listing of employees and building users. Ex: administrators, faculty, staff, students (TAs, RAs, PAs, part timers), maintenance and security staff, patients, prisoners, visitors, etc.** **6. Existing Fixtures, Furniture and Equipment** **7. As-builts, CAD drawings** **8. For in-building and on-site investigation:** **The Institution may prefer a minimum of two weeks notice for some work on the institution, so that it does not interfere with operations (ex: asbestos sampling, roof and mechanical room access, material demolition/sampling, geotechnical work, other survey work, etc). The notice to the Institution normally would include a simple Work Plan. For safety and security reasons, make sure that your team (and sub consultants) always carry proper credentials (a business card and drivers license) so that they may verify who they are and who they are with at all times. Also, make sure that your team always "checks in" with the building manager when they arrive and provide their estimated departure time. The Institution may have a log sheet for visitors to sign in/out with ___. The log sheet will contain the consultant name, company they represent, cell phone # (in case we need to locate them in the building) and emergency contact phone #.** **For geotech work, the Work Plan should include all the typical info including call logs to diggers' hotlines, location of utilities, location and depth of proposed borings, dates of work, etc.** **The Work Plan will need to be reviewed by DSF and Institution.** **Check with institution's parking office for consultant parking needs.**		

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
14 - Collect Regulatory Requirements and Guidelines (City, County, State, Federal, and Institution)	**Purpose:** **Learn of any unique approval and/or regulatory requirements that effect scope, budget, schedule, and A/E services.** **• Learn of any formal approval bodies or formalized review steps required within the Institution.** **• Learn about DSF and State Building Commission approvals** **• If directly related to the success of the project, set up meetings with external partners and stakeholders, e.g, neighborhood leaders, alderpersons, zoning officials, city officials, Wisconsin Historical Society, etc.** **• If seeking LEED certification, register project**	**A/E**	**#29 Example: List of Zoning Requirements, Applicable Codes and Preliminary Review, DSF and Institution Design Standards, Governmental Requirements, SBC Approvals, Institution or Agency/Board Approvals, LEED requirements, EIS, etc.**
15 - Select members for Focus Groups: 2-10 people	**Seek wide representation from those affected by the project:** **• Internal groups (administrators, managers, key employees, faculty, staff, students, physical plant, patients)** **• External groups (alumni, Board of Visitors, members, routine visitors, neighbors, concerned community citizens)**	**Institution led, assisted by DSF and A/E/Consultant**	
16 - Develop Questions to be posed to 1st Workshop Focus Groups	**General (global) and specific questions to elicit core values, vision and grand goals**	**A/E/Consultant led, with input by Institution**	**#9a Ex: Core Values** **#9b Ex: Visioning and Global Questions** **#9c Ex: Experience Audit topics**
17 – Critique questions to elicit the most meaningful responses	Critiqued at Building Committee meeting or Project Meeting. Questions for subsequent meetings should be customized and reviewed for desired effectiveness	Institution, DSF, A/E/Consultant	
18 - Put questions into priority order	Purpose: To ensure most important questions are answered during Focus Group meetings	Institution, DSF, A/E/Consultant	
19 - Schedule Specific Days/Times for Focus Groups for Workshops	• Ensure attendance • For length of Programming Phase	Institution Lead, A/E/Consultant	
20 - Distribute Focus Group questions and homework, one week in advance of all Workshops to attendees	Purpose: Because this is a public sector project, Focus Group leaders need to discuss questions with people in their respective departments to gain broad based input. This helps defuse political issues that typically arise when certain people feel excluded or feel their viewpoints have not been considered.	A/E/Consultant Lead, Institution	#8 Example: Pre-Work Session Administrative Protocol

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
21 - Workshop 1 **1st Focus Groups Workshop – Core Values Visioning –** **(Experience audit if renovation) brainstorming with Building Committee and then each focus group including other institution groups**	**Purpose:** **• A/E/Consultant must learn the core values and then the vision, main goals, big picture objectives, and what would be the "dream facility"?** **If your project is a major renovation then you should consider offering an "Experience audit" workshop with the core team and focus groups to elicit people's perceptions of the existing place, existing people (service providers / users), and existing products / services, etc. and what should be changed and improved, before your "Visioning" workshop.** **1. Agenda for Workshop:** **a. Indicate day, date, time and duration of sessions (usually all day),** **b. Topics, departments, work units, expected attendees, an introductory paragraph indicating purpose, expected outcomes, and next step.** **c. Distribute agenda of workshop in advance of Focus Groups** **2. Mini-Agenda:** **For each focus group, handed out at the beginning of each session. This Mini-Agenda includes the previously distributed questions and helps eliminate potential angst about the purpose of the focus group and role of each focus group member.** **3. Preparation:** **a. Formal name tags for core team, building committee and A/E/Consultant presenters, informal name tags for focus group attendees** **b. Beverages and treats by host user group if desired** **c. Room set-up. Easel to record responses. For Small group "U" shaped table to enable facilitator to better engage focus group. For Large groups (>15) - rows of tables,** **d. Listening focused, style to match needs and sophistication of focus groups,** **e. Need animated and strong facilitator,** **f. Need recorder of ideas on large paper in front of room or via video projector. May record focus group work session by audio or a/v. Real time changes on electronic presentations is an effective technique to expedite progress.**	**A/E/Consultant led**	**9a Example: Core Values Discussion** **#9b Example: Visioning & Global Questions** **#9c Example: "Experience Audit" Topics** **#10 Example: Workshop 1: Visioning**

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
	4. Facilitation process: **a. Introduce all facilitators and attendees,** **b. Introductory comments by facilitator - tell who you are, purpose of meeting in context of whole project, expected outcomes** **c. Engage all attendees; important to elicit viewpoints from <u>each</u> person in the focus group** **d. End each focus group and/or Workshop by summarizing main points, tell them next steps, and thank the group for their time** **5. To improve on each successive Workshop, end the day of focus groups or each Workshop with a debriefing with Core Team and Building Committee; discuss what went right, what went wrong, and next steps** **6. Workshop note taking format:** **a. List of Attendees, Summary, Issues Resolved, Homework/Assignments, and Closing indicating next meeting day, date, time, purpose and** **b. Issued within 5 days after meeting to enable Building Committee/Core Team to react to and prepare for the next focus group and/or Workshop or meeting.**		
22 - Workshop 2 **2nd Focus Group Workshop – A/E/Consultant is listening to learn about user primary activities, functions, and ways of doing business**	**Purpose:** **• Learn activities, functions, ways of doing business** **• Obtain each focus groups' expectation of their model facility with open ended questions** **Process/Facilitation:** **Repeat format of Workshop #1** **Special Workshop scheduling:** **45 – 90 minutes per workshop; anticipate overlapping Workshops and arrange for a second adjacent room to begin next Workshop on schedule**	**A/E/Consultant led, DSF, Agency, Institution**	**#12 Example: Agenda**
23 - Post Work Shops Survey of participants/Focus Group members	Purpose: Gain feedback on effectiveness and efficiency of Workshop. Then make adjustments to future Workshops.	Institution or A/E/Consultant	#11 Example: Post Workshop Survey Questions
24 - Conduct Observations and Personal Interviews with Users/Focus Groups	**Purpose:** **• Observation and assessment of working units and individuals to intimately learn of the activities and functions and associated physical needs of the occupants/users.**	**A/E/Consultant**	**#23, 23 Example Classroom /Lab Questionnaires, #24 Basic Compilation of User Needs**

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
	Protocol: **• At the site, the A/E/Consultant has to introduce themselves, establish some repoire with the individual or group they are observing, and explain the purpose and goals of his/her visit.**		
25a - Benchmarking Tours / Models of Excellence: **Virtual / Online**	**Research and compile On-line sources and distribute to all team members. A/E/Consultant to collect all examples and compile aggregate list for team.**	**Agency/Institution DSF, A/E/Consultant**	**National benchmarks or standards if available**
25b - Benchmarking Tours / Models of Excellence: **On-site and local newly constructed facilities**	**Purpose:** **• Learn from recently completed like-kind facilities:** **-Ask the user/manager what went right, what went wrong, what he/she would do differently?** **-How do you feel about the facilities and what is worth emulating to achieve your own state-of-the-art facility,** **-Inspect building finishes,** **-Compare their room sizes and locations verses your proposed rooms** **-Obtain precedent pricing (cost/gsf)** **• Debriefing immediately after tours**	**Institution led tours on-site, A/E/Consultant or DSF led tours off-site**	
25c - Benchmarking Tours / Models of Excellence: Off-site and out of state facilities	Purpose: • Learn what functions right, what that occupant would do differently, seek out best ideas/optimum solutions for your facility, check building finishes, suitability of room sizes and location within building. Locations proposed by the team. Due to cost, the team needs to prioritize trips and select the best single package of destinations that can fit into a short timeframe: 1-3 days including travel time. It is best to take trips during the middle of the programming phase, after the general scope of project is clarified by all stakeholders. Debriefing before returning home.	A/E/Consultant led tours, DSF, Institution	
26 - Workshop 3: Focus Group Sessions	**Purpose:** **• Detailed collection of operational needs with major and minor departments** **Process/Facilitation:** **• Repeat format of Workshop #1 or #2, with homework assigned before and after Workshops**	**A/E/Consultant led**	**#13 Example: Agenda**
27 - Workshop 4: Focus Group Session: Physical Plant, Transportation, Security	**Purpose:** **• Collect data from support stakeholders: physical plant, parking/transportation, safety/security, sustainability, IT, mail, shipping/receiving, waste disposal** **Process/Facilitation:** **• Repeat format of Workshop #1 or #2**	**A/E/Consultant Led**	**#14 Example: Agenda**

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
28 - Workshop 5:	Purpose: • Detailed collection of operational needs with major and minor departments Process/Facilitation: • Repeat format of Workshop #1 or #2	A/E/Consultant led	#15 Example: Agenda
29 - Workshop 6 +-	Purpose: • Presentation of synthesis of all collected and analyzed information such as adjacencies, budgets, schedules. Process/Facilitation: • Repeat format of Workshop #1 or #2	A/E/Consultant led	#16 Example: Agenda
30 - Develop Space Tabulation: Proposed Space	**Purpose: Very Important; To establish the size of the building project.** **Show two sets of columns of data:** **• "Existing rooms/spaces, occupants" and** **• "Proposed rooms/spaces, occupants"** **Tabulation should include all employees and users. Administrators, faculty, staff, students (TAs, RAs, part time workers), and visitors**	**A/E/Consultant**	**#17 Example: Space Tabulation: Existing and Proposed** **#18 Exhibit: State (DOA) Space Standards** **#19 Exhibit: UW System Space Standards**
31 - Develop Adjacency Matrix	Purpose: To help A/E and User/Agency determine optimum adjacencies as the basis for "Bubble Diagrams" or Block Diagram to develop floor plans which foster optimum user efficiency and productivity. Note: verbal description may be used on simple projects.	A/E/Consultant	#20 Example: Adjacency Matrix
32 - Graphic Space Analysis	Purpose: To illustrate all rooms and their relative sizes by category. Examples include: • General Use Facilities (General Purpose Classrooms, General Access Computer Rooms, Building/Student Support Space) • Administration (Offices, Workrooms, Clerical) • Department Facilities (Studios, Instructional Labs) • Research Facilities	A/E/Consultant	#21 Example: Graphic Space Analysis
33 – Develop Project Budget and Schedule	**Purpose:** **To learn of potential major budget issues before extensive time is put into the development of Room Data Sheets**	**A/E/Consultant**	See DSF Capital Budget Cost Est. Guidelines: "Project Budget Worksheet" **#32 Example: Budget Summary** **#33 Example: Schedule Summary**

TASK	REMARKS	RESPONSIBILITY	DELIVERABLES
34 - Develop "Bubble Diagrams" or Block Diagrams (and Stacking Diagrams for multiple storied building)	**Purpose:** **Based on the Space Tabulation or Graphic Space Analysis and Adjacency Matrix, this helps the A/E/Consultant and User/Agency understand optimum adjacencies as the basis to develop floor plans that will achieve maximum user /agency productivity.**	**A/E/Consultant**	
…Continuing meetings, workshops, tasks as necessary …		Typically A/E/Consultant led	
36 - Room Data Sheets	**Purpose:** **This forms the basis for designing rooms/spaces in the Design phase.** **Detailed listing of space requirements: Size, function, adjacency, environmental controls, fixed and movable equipment**	**A/E/Consultant**	**#25 Example: Room Data Sheet – Offices** **#26 Example: Room Data Sheet- Classrooms** **#27 Example: Room Data Sheet - Labs**
37 - Equipment Schedule: Movable, Fixed, Special	**To complete the Room Data Sheets, provide a Listing of all equipment. Fixed equipment requiring MEP connections or special vibration isolation is especially critical to list to enable the future A/E/designer to properly design engineering systems.**	**A/E/Consultant, Institution**	**#28 Example: Equipment Schedule**
38 - Develop design criteria and metrics to ensure project success	**Purpose:** **These design criteria and metrics make it clear to the design team of major expectations and performance measures required by the user/agency, DSF, and other stakeholders. They act as a thread through the design and even construction phase.**	**A/E/Consultant, DSF, Agency, Institution**	
39 - Review Draft Program Statement	**There should be a least two drafts and all vested parties should be providing review comments.**	**A/E/Consultant, DSF, Institution, User Group, Physical Plant. See Section D, page 17**	
40 - PROGRAM STATEMENT SIGN-OFF	**Purpose:** **• Hold Agency, Institution, DSF, and A/E/Consultant accountable to contents,** **• Helps prevent scope creep during design phase,** **• Establishes the juncture between the Programming (pre-design phase) and design phase.**	**Cover page signoff by Agency 1 Rep, Agency 2 (Institution Rep), DSF PM, A/E/Consultant Rep**	**#4 Example: Program Statement Title/Sign-Off Page**

C. "PROGRAM STATEMENT" CONTENT CHECKLIST

Ref: DSF Policy & Procedure Manual for Architects/Engineers and Consultants,, Art. 3.C.

Project Name:_____
Location:_____
DSF Project No.:_____

INSTRUCTIONS

1. Use this checklist to learn of the breadth and depth of the problem and issues to be solved and to help prepare contents of the Program Statement.

2. Distribute this checklist to the team members listed below. Then, using your best judgment, check off all components and issues that pertain or could pertain to your project.

3. Update this checklist throughout the programming process. This helps ensure all programming and pre-design issues are identified and resolved to establish a solid foundation on which to proceed into the Design Phase.

PARTICIPANTS and REVIEWERS of the PROGRAM STATEMENT

AGENCY CENTRAL
___Agency Rep
___Architect
___Engineers (MEP)
___Capital Budget Analyst

INSTITUTION
___Institution Rep
___User Groups
___Institution Planning Committee
___Facilities Planning Office
___Site/Waste/Recycling
___Grounds, Landscaping
___IT, Telecom
___A/V, Classroom support
___ADA
___Physical Plant Services
- ___Carpentry, Paint
- ___Masonry, Roofs
- ___Plumbing, Fire Protection
- ___HVAC, Sheet Metal
- ___Electrical
- ___Custodial & Bldg Oper.
- ___Keying/Locks/Security sys
- ___Elevator
- ___Mail Services, Shipping/Rec

___Safety/Environmental Office
___Police/Security
___Transportation/Parking/Bikes
___Historical Preservation Officer
___Capital Budget Analyst

DSF
___Project Manager
___Capital Budget Analyst
___State Chief Architect
___State Chief Engineer
___All Agency Fund Reviewer
___Contract Officer
___Division 1 Spec Reviewer
___Civil/Site Engineer
___Landscape Architect
___Asbestos/HCM Engr.
___Environmental Engr.
___Roofing Engineer
___Masonry, Envelope Engr.
___Structural Engineer
___Plumbing Engineer
___Fire Protection Engineer
___HVAC Engineer
___Utilities Engineer
___Heating Plant Engineer
___HVAC Controls Engineer
___Energy Management Engr.
___Conserve Wisconsin Planner
___Electrical Engineer
___Telecom Engineer
___A/V Engineer
___Fire Alarm Engineer
___Security System Engineer
___Construction inspectors
___Other DSF Technical reviewers
___Leasing expert, if applicable

CONSULTANTS
___Architectural
___Interior Designer
___Civil
___Landscape
___Structural
___Plumbing
___HVAC
___Fire Protection
___Electrical
___Telecommunications
___Audio/Visual
___Acoustics
___Security System
___Cost Estimator
___Food Service
___Parking/Transportation
___Pool/Therapy Pool
___Soils/Geo Technical
___Laboratory
___Lighting
___Sustainability / LEED
___Commissioning
___Constructability Consultant
___Asbestos/HCM
___Historical Preservationist
___EIS Consultant

PROBLEM IDENTIFICATION, VISION, GOALS & OBJECTIVES:

___Seek Out and Define the root Problem
___List vision for project, ___If renovation: List current perceptions of place, products/services, people
___List project/building-wide goals, ___List goals and objectives for individual depart., work units, spaces

RISK FACTORS and GENERAL PROJECT PARAMETERS:

___Budget: ___Funding Sources, ___SBC Approval Deadlines, ___Grant/Donor conditions,
___Temp. Reloc. ___Material Shortages, ___Adaptive reuse opportunities
___Schedule: ___Special Occupancy Timing, ___Phasing, ___Temporary Relocation Arrangements
___Dominoes with other projects, ___City Zoning Approvals, ___Federal Approval Deadlines
___Site Constraints: ___Size, ___St. traffic, ___Pedestrian or ADA Accessibility, ___Public Transit Access
___Underground Water table, ___Utilities, ___Boundaries, ___Easements, ___EIS, ___Flood plain
___Archeological, ___Brownfields, ___Haz. Mat'l Abatement or Remediation, ___Future Acquisitions
___Accommodation for future expansion, ___ City Zoning
___Special Codes and Design Standards, ___DSF Sustainability Stds and Checklist, ___Commissioning,
___LEED Certification, ___Historical Preservation, ___Institution Master Plan, ___Neighborhood,
___City, ___County, ___State, ___Federal Codes/Standards (i.e., NIH, FDA, etc.)
___Politics, ___Internal Opposition, ___External Opposition, ___Special Communications Required

ANALYSIS OF EXISTING USER/AGENCY OPERATIONS / PROGRAM:

___Operations Data: ___Org. Charts, ___Strategic Plan, ___Academic Plan, ___Space Utilization Studies
___People Counts (FTE, LTE, HC, visitors), ___Classroom Demand Analysis, ___Financial Analysis
___Observation and Analysis of User/Occupants' Activities, Relationships, and Adjacencies, ___Oper Eff.

ANALYSIS OF EXISTING PHYSICAL CONDITIONS:

___Facilities Data: ___Existing Studies, ___Institution Master Plan, ___Utility Plans, ___Exist. Plans/Specs
___Existing Site Surveys, ___Existing Maps, ___Prelim Geotech, ___Hist. Features, ___Reuse opps.
___Site/Building Review: ___Visual Impact, ___Accessibility Check, ___Circulation Eff., ___Energy Anal.
___Space Functional Anal.: ___Suitability, ___Adjacency Issues, ___Circulation Issues, ___MEP Conditions
___Adverse Existing Building Conditions: ___Hidden conditions in floors, walls, ceilings, ___MEP Conditions
___User/Agency salvaged items, ___Existing movable, fixed, special equipment condition check
___Hazardous Materials/Remediation: ___Asbestos, ___Lead paint, ___Mercury, ___Freon, ___Oxidizers
___Perchloric acid, ___PCBs, ___Hydraulic fluids, ___UST, ___Contam. soils, ___Flam/Comb liquids
___Matrix for assignment of responsibility (Agency, DSF, A/E, Contractor, HCM contractor/vendor)

USER/AGENCY: ACTIVITIES / FUNCTIONS:

___Number and types of Occupants and types, and associated activities, related functions, hours of use
___UW: ___Enrollment - headcount, credit hrs, no. of hrs seats occupied, WSCH
___UW: ___Utilization – classroom and lab hrs of use and percent station utilization (SOR)
___UW: ___Class sizes compared with room capacities, the mix
___Space Tabulation, Existing and Proposed, which lists all rooms and spaces, occupants, and ASF
___Listing of all hazardous materials used, ___Determination of safety and security procedures
___Listing of all major equipment to be reused or needed

DESIRED ADJACENCIES / CIRCULATION:

___Matrix showing mandatory and desirable adjacencies and non-desirable adjacencies
___Determination of optimum internal and external circulation, ___shipping, receiving, materials handling
___Building Access: ___General Use, ___After hours public access, ___Restricted employee access

DESIRED FACILITY or EQUIPMENT OPERATIONS & MAINTENANCE:

___Hours of Operation, ___Economies of Staff analysis
___Security Management
___Operations & Maintenance Criteria to Match Owner's Needs and Expectations
___Quality Requirements for Materials and Construction
___Environmental & Sustainability Goals, ___Energy Efficiency Goals
___Special Health, Hygiene, and Indoor Environmental Requirements
___Training for Owner's Personnel
___Functional Testing of Plumbing, HVAC, and Electrical Systems
___Window Cleaning

SITE COMPONENTS:

Existing
___Landholding, Ownership, Boundaries
___Site Survey, ___Archeological Survey
___Soil borings, subsurface conditions
___Underground Storage Tanks
___Topography, drainage
___Vegetation/Landscaping

Proposed
___Landholding, Ownership, Boundaries
___Site Survey, ___Archeological Survey
___Soil Borings, subsurface cond. ___remediation
___Underground Storage Tanks
___Topography, drainage
___Vegetation/Landscaping (see next page)

Utilities: Existing
___Local Utility or Instit. Electrical Pwr, ___ exp cap.
___Local Utility or Institution Gas, ___expansion cap.
___Local Utility or Instit. Water Line, ___exp. capacity
___Water Source, ___Own Wells, ___City Wells
___Local Utility or Instit. San Sewer , ___exp. cap
___Inst. Waste Wtr Treat Plt, ___ Inst. Sep System
___Public Owned Waste Wtr Treat Plt.
___Local Utility or Instit. Storm Water, ___exp. cap
___Erosion Control
___Instit. Chilled Water, ___expansion capacity
___Instit. Steam and Condensate, ___exp. capacity
___Institution Fire Alarm Loop
___Institution Communications (Signal) Sys, ___exp.
___Institution Coaxial Cable System
___Steam Tunnels
___Site Lighting

Proposed
___Local Utility or Institution Electrical Power
___Local Utility or Institution Gas
___Local Utility or Institution Water Line
___Water Source, ___Own Wells, ___City Wells
___Local Utility or Institution Sanitary Sewer
___Inst. Waste Wtr Treat Plt, ___ Inst. Sep Sys.
___Public Owned Waste Wtr Treat Plt.
___Local Utility or Institution Storm Water
___Erosion Control
___Institution. Chilled Water
___Institution Steam and Condensate
___Institution Fire Alarm Loop
___Institution Communications (Signal) System
___Institution Coaxial System
___Steam Tunnels
___Site Lighting

Pedestrians and Vehicles
___Outdoor Activities, ___Plazas, ___Kiosks, ___Seating, ___Special use areas
___Pedestrian:
- ___Employee/Faculty/Staff, ___special egress/ingress
- ___Students, ___special egress/ingress
- ___Visitors, ___special egress/ingress

___Bicycles: ___bike path, ___bike racks
___Vehicles:
- ___Cars: ___ students, ___staff, ___visitors, ___rental
- ___Motorcycles, ___Mopeds
- ___Physical plant service trucks, ___size
- ___Mail Services, ___institution, ___private
- ___Vans: ___student, ___staff transportation, ___Para transit
- ___Vendor loading/shipping/receiving, ___dock size, ___dock height, ___ no. deliveries per day
- ___Buses: ___campus, ___city
  - ___Bus Drop Off, ___bus shelter pad
- ___Emergency Vehicles, ___Ambulance, ___Fire Trucks

___Parking:
- ___Lots location, ___ramp, ___number of stalls, ___accessible stalls
- ___Drop off and passenger loading, ___cars, ___buses, ___vans
- ___Parking control equipment, ___Payment equipment

Service/Delivery/Shipping/Receiving
___Dock Access, ___size, ___dock height, ___number of deliveries per day, ___special materials/products

Waste Removal
___Dumpster ___Garbage collection, ___size

Site Security
___Blue Phones, ___Camera, ___Card Access, ___Detection system

Site Signage:
___Building Sign, ___Institution Way Finding

Special Events, Features, Accommodations
___Vehicles, ___pedestrians, ___temporary parking, ___other

BUILDING COMPONENTS (New/Proposed):

Site/Civil (immediately adjacent to building perimeter)
___Side walks, ___Railings, ___other
___Paving, ___Driveways, ___Dock
___Building Service Lines: ___water, ___sanitary sewer, ___storm water, ___chilled water,
___hot water or steam, ___telephone, ___communications, ___electrical power, ___gas meter,
___water meter, ___ electric meter, ___fire hydrant, ___fire connection

Landscaping
___Plantings, ___Grass/Sod, ___Existing Trees or Plants to remain, ___On-site Stormwater Mgmt.
___Green Roof/Garden/Plaza

Architectural Systems
___Aesthetic standards/Institution design standards, ___Campus Master Plan Compliance
___Casework
___Door Hardware, ___ADA doors, ___motion detectors, ___magnetic locks, ___magnetic hold opens
___electric strikes, ___fire doors/shutters, ___Cylinders by or keyed by Owner?, ___ see "Secur. Sys"
___Wall/Partitian Types, ___Gyp Bd, ___Masonry, ___Other, ___Special Acoustics
___Daylighting, ___Windows, ___Skylights, ___Borrowed lights
___System Furniture, ___Specialties
___Special Finishes
___Roof Type, ___Warranty
___Conveyance Sys, ___Elevators (speed, capacity, campus standard specs), ___Pneumatic Tube Sys
___Special Construction, ___Radiation Shielding, ___RF Shielding, ___MRI
___Signage: ___interior doors, ___exterior, ___way finding (interior and exterior)
___Room numbers (floor plans match institution space standards)

Structural Systems
___Foundations, ___special slabs, ___special water control/proofing
___Optimum superstructure, ___special loading, ___unique soil bearing conditions
___Special Floor or Structural Loading, ___Vibration Control

Plumbing Systems
___Fixtures, ___Emergency (shower/eye) fixtures, ___EWC, ___Hose Bibs. ___Showers
___Sanitary Sewer
___Storm sewer
___Domestic Potable Water, ___pressure reducing values, ___tempered water, ___laboratory water
___Waste and Vent: ___domestic water, ___acid waste lines, ___acid waste & neutralization basin
___Special systems: ___distilled water, ___DI water, ___RO water, ___pure water (final polishing),
___compressed air, ___natural gas, ___oxygen, ___nitrogen, ___argon, ___helium, ___vacuum

Fire Protection Systems
___Sprinkler
___Clean agent system, ___Preaction
___Standpipe, ___fire pump

HVAC Systems
___Steam, ___Meter
___Hot Water, ___Recirculation pumps
___Chilled water, ___chiller, ___DX chiller (if small building)
___Air Handling Unit, ___Minimum outside air
___Exhaust: ___General, ___Laboratory, ___Special filtration
___VAV Terminal Systems
___Smoke Evacuation System
___HVAC Controls: ___DDC, ___Pneumatic
___Energy Management System: ___Metasys, ___other
___Accessibility to components for repair and replacement

Electrical Systems
___Substation: ___Transformer, ___location
___Distribution System: ___Exterior switchgear, ___Motor control
___Normal Power
___Emergency Generator / Standby Power, ___location
___Uninterruptible Power Source
___Special Power to equipment
___Lighting: ___Interior, ___Controls, ___Dimming, ___Exterior (building mtd), ___Day lighting
___Occupancy Sensors

Fire Alarm Systems
___Smoke Detection, ___Heat Detection
___Audio/visual devices
___Smoke Evacuation System, ___Blow open controllers, if required
___Fire Alarm control module, if required
___Panels and Reporting, ___Fire Command Center

Telecommunications System
___Voice jacks, ___Data jacks, ___Video jacks
___Fiber backbone
___Intercom
___Wireless, ___ Assisted Listening (RF or IR)
___Hardware: ___Data racks, ___Patch panels, ___Switches, ___Routers, ___Servers
___Cable Tray

Audio/Visual Systems
___Audio: ___Program speakers, ___Wireless Remote
___Visual: ___Video projector(s), ___Document camera, ___CD, ___DVD
___Instructor console: ___Touchpanel/control system, ___Task lighting, ___Auxillary pwr, ___Microphone
___Closed Circuit (campus) TV
___Video conferencing
___Cabling: ___Copper, ___Fiber
___Satellite links

Clock System
___Standard, ___Radio Frequency central (primex)

Security Systems
___Access Control for doors: ___Prox.cards, ___Mag.hold open, ___Elect. strike, ___Door cont., ___REX
___Video Surveillance
___Intrusion Detection
___Integration and coordination of door locks, HVAC smoke evacuation, electrical power supply, surveillance, energy systems, pneumatic controls, blow open controls, security head end equipment
___Master diagrams and contractor responsibility matrix showing who supplies what product & who installs

Fixed and Lab Equipment (Built-In, CFCI)
___Fume Hoods, ___Canopy Hoods, ___Telescopic Hoods, ___Biosafety cabinets, ___Fire safety cabinets
___Autoclaves, ___Plant Growth Chambers, ___Compact Shelving, ___Water Tanks
___Matrix for Furniture, Fixtures, Equipment (FFE): CFCI, OFCI, OFOI

Special Equipment
___Lab Equipment: ___Centrifuges, ___Sterilizers, ___Refrigerators ___Freezers, ___Water polishers
___Electron microscope, ___Animal Cages, ___NMR, ___MRIs, ___Laser
___Institution supplied lab equipment or metering devices needing special MEP connections
___Library Equipment: ___Shelving; ___Athletic, Recreation Equipment

Movable Equipment (Non-built-in, OFOI)
___Movable Equipment: (5% +- of new const. cost) _Tables, _Desks, _Chairs, _Filing Cabinets, _other

CONTRACTOR MEANS & METHODS:

___Staging, storage of materials, ___Material / Truck Deliveries During Construction
___Institution parking policy, ___Contractor Parking Permits and proximity,
___Occupancy of site and/or bldg during construction, ___Special restrict. against noise, time, odors
___Maintaining utility services and mech. and elect. systems during occupancy (e.g. research labs)
___Temporary Rerouting of pedestrians and vehicles during construction: code issues
___Hoisting: ___exterior, ___interior
___Construction waste management, ___ Salvage items

METRICS TO ENSURE SUCCESS

___Key design and operational criteria and metrics to ensure project success
Ex: 1) Residence hall – completion by occupancy date
2) New building – conformance to institution master plan and enumerated budget amount
3) Renovation – improved internal circulation and user group adjacencies
4) Addition – compatibility to main building vernacular and satisfaction of Wis. Historical Society
5) Energy efficiency metrics: exceed EO 145
6) Low operating and maintenance costs

D. TERMINOLOGY

GENERAL CONCEPTUAL TERMS	DEFINITION	SYNONYMS
Guiding Principles	1. A basic truth, law, or assumption. 2. A fixed or predetermined policy or mode of action 3. A basic or essential quality or element determining intrinsic nature or characterization behavior.	Main beliefs, values, philosophy, ideology
Values	1. A principle or standard or quality considered worthwhile or desired	Principles, standards, morals, ethics, ideals
Goals	1. The purpose toward which an endeavor is directed.	Objective, aim, end , ambition, purpose, aspiration
Purpose	1. The objective to what one is striving. 2. A result or effect that is intended or desired. 3. The matter at hand, point at issue	--Reason, point, idea principle, rationale, function, use —-Intention, aim, object, goal, target, end --Drive, resolve, persistence, Tenacity, single mindedness
Objectives	1. Of or having to do with a material object as distinguished from a mental concept. 2. Having actual existence or reality. 3. Uninfluenced by emotion, surmise, or personal prejudice. 4. Based on observable phenomena, presented factually	--Purpose, aim, point, idea, goal, intention, intent, reason, -- neutral, unbiased
Criterion	1. A standard, rule, or test on which a judgment or decision can be based.	Decisive factor, principle, measure, standard, norm, condition, reason,
Outcomes	1. A natural result, consequence	
Results	1. To occur or exist as a consequence of a particular cause. 2. To end in a particular way. 3. The consequence of a particular action, operation, or course, outcome	--Consequence, effect, product, outcome, --end result, findings, conclusion
Vision Statement	1. The manner in which one can see or conceive of something	--Dream, idea, mental picture, visualization, --Foresight, prediction, farsightedness,
Mission	1. The business with which such an organization/office or person is charged	--Assignment, task, job, work, charge, undertaking duty, operation, --Vocation, purpose

PHYSICAL / SPACE PLANNING TERMS	DEFINITION
Assignable Square Feet (ASF)	1. This is the square feet (size) of a room which is assigned to or available for assignment to an occupant or program function, i.e., a function aligned with the main programmatic functions of the building. These rooms are typically occupied by people or animals. Examples include classrooms, offices, laboratories, gymnasiums, procedure rooms, and animal holding rooms. ASF^1 = area (length x width) of the inside of a room. 2. Assignable Square Feet can also mean a "station" size: ASF^2 = the number of square feet required to accommodate one person, including circulation, teaching station, and service. Ex: 20 occupants x 20 asf/ per occupant station per code = 400 asf room Ex: 100 students x 18 asf/ standard student station = 1800 asf lecture hall
Net Assignable Square Feet (NASF) (i.e., Total ASF)	The sum of all "assignable" areas on all floors. Assignable areas shall be the sum of all enclosed assignable spaces to an occupant or program function, measured from the inside faces of the walls. Unfinished space is included.
NON Assignable Square Feet	These are general use spaces which are common to all buildings, are not occupied over long periods, and are NOT assigned to an occupant or program function. Examples include public circulation elements (corridors, stairwells, elevators), custodial, mechanical, telecom closets, toilet rooms, main lobbies, and building construction components (walls, columns, windows, etc).
Gross Square Feet (GSF)	The overall gross square feet of a building. GSF = The total sum of the enclosed areas on all floors of the building measured from the exterior faces of exterior walls or from the center line of walls separating buildings. The GSF includes basements, mezzanines, intermediate floored tiers, penthouses of headroom height, stairwells, elevator shafts, and mechanical chases. The GSF does not include exterior features such as chimneys above the roof line, exterior terraces or steps, exterior underground pipe trenches, and etc.
Efficiency Factor (EF)	A calculation to measure the efficiency of a building's space use and is expressed as a percentage. It is required on all state building projects (renovations, additions, new buildings). EF = Assignable Square Feet (ASF) / Gross Square Feet (GSF)
Floor Area Ratio (FAR)	The ratio of all building gross square feet on a campus/institution divided by the gross square feet of land for that campus/institution. FAR is a rule of thumb to compare densities of campuses/institutions. FAR = Total Buildings GSF / Total Land GSF
Occupancy Capacity # Persons	The total number of occupants allowed per state building/fire code. Units are according to building type (No. beds, No. occupants, No. work stations, No. seats, No. residents, No. patrons, etc.).

SPACE PLANNING TERMS WHICH CAN BE USEFUL IN VALIDATING SPACE NEEDS. THEY CAN CONTRIBUTE TO THE BASIS FOR A "GAP ANALYSIS", I.E., THE GAP BETWEEN QUANTITATIVE BASED PLANNING AND QUALITATIVED BASED PLANNING. THE BELOW TERMS ARE TYPICALLY APPLIED IN ASSOCIATION WITH "HEGIS" CATEGORIES. Note: National benchmarking standards for various occupancies/building types are useful in quantitative analysis.	
HEGIS Categories	For Higher Education projects The "Higher Education General Information Survey" is a nationally recognized numerical coding for room use. The below codes also breakdown into sub-codes. 100-Classroom 200-Laboratory 300-Office 400-Library 500-Special Use (Physical Education, Ratio/TV) 600-General Use (Assembly, Food Service, Student Unions) 700-Support (Physical Plant, Hazardous Materials, Data Processing) 800-Health Care 900-Residential (Residence Halls, Apartments, House) 000-Unclassified (Inactive area, unfinished area) Non-Assignable (Circulation, Mechanical area) Structural Area (Structural component area)
Room Utilization Rate (RUR)	Utilization criteria for Instructional Spaces: This is sometimes referred to as a productivity factor and can be calculated in two ways. 1. The number of daytime hours per week the classroom or instructional lab is scheduled to be used. $RUR^1 = \frac{\text{\# daytime hours of room use}}{\text{week}}$ 2. Utilization standard criteria for classroom spaces: Room Utilization Rate is the number of hours a room is in use or planned for use for scheduled classes. This rate is sometimes expressed as a percentage of the number of hours available in which to schedule classes. $RUR^2 = \frac{\text{Total Weekly Student Contact Hours (WSCH)}}{\{\text{\# of Student Stations x Weekly Room Hours (WRH) x Station Occupancy Rate (SOR)}\}}$
Station Occupancy Rate (SOR)	Utilization criteria for classroom and instructional laboratory spaces and can also be called the room occupancy ratio. SOR is the percentage of seats (stations) occupied or planned for occupancy during scheduled classes. The SOR can be calculated for individual rooms or institution-wide as follows in two ways: $SOR^{1} = \frac{\text{\% seats occupied}}{\text{Hour}}$ $SOR^2 = \frac{\text{Weekly Student Contact Hours (WSCH)}}{\text{(\# of Student Stations, i.e. seats) x (\#. of hours available)}} \times 100$
Weekly Room Hours (WRH)	A utilization count typically for classrooms and instructional laboratories and is related to Room Utilization Rate. $WRH = \frac{\text{\# hours a room is in use}}{\text{week}}$

Weekly Student Contact Hours Or Seat Hours (WSCH)	WSCH is the number of equivalent hours (50-minute hours) that seats are occupied in a week during scheduled on-campus classes regardless of whether credits leading to a degree are awarded. They are collected on the basis of room use, i.e., by lecture (in classrooms, discussion groups, and seminars) and instructional laboratories. The number of WSCH is determined for each instructional space as follows: 1 WSCH = 1 student occupying a classroom or instructional lab seat for 1hour WSCH = # of hours classes are scheduled) x (# of students in scheduled classes)
Space Factor (SF)	Space factors are used to calculate space for classrooms and instructional laboratories. SF^1 = NASF Student Station (SS) Utilization Rate (UR) x Student Occupancy Rate (SOR %) Ex: SF 1.11 = 20 (NASF SS) 27 (UR) x .667 (SOR %) SF^2 = ASF WSCH x SOR SF^3 = ASF SS Student Clock Hours
Space Allowances (SA)	Space Allowances expressed in assignable square feet are typically used to calculate the amount of total needed classrooms and instructional spaces, but can also be used for total needed spaces listed in the HEGIS categories, i.e., offices, research laboratories, and study facilities, food service, etc. SA ASF for classrooms = SF classrooms x WSCH SA ASF for offices = SF x (FTE faculty and staff requiring an office)
Space Quality Issues	Issues to evaluate and determine the quality and functionality of space: - existing physical deterioration - environmental/energy problems - technology limitations - adjacency issues - accessibility and circulation issues - configuration of current space for the assigned function - undesirable aesthetics and poor visual impact - historical significance, if applicable - general suitability of current space for the assigned function

FINANCIAL PLANNING TERMS	DEFINITION
Non-construction Costs (aka “Soft” Costs)	Soft costs include: A/E/Consultant fees, DSF Fees, Agency work, Movable Equipment, and Land acquisition Costs, etc.
Construction Costs (aka “Hard” Costs)	Hard costs include: Site development costs, Utility materials and installation costs, Building costs, Hazardous materials abatement, Construction testing, HVAC Testing and Balancing, DDC installation, and Other costs directly related to construction work
Total Project Cost (TPC)	Sum of all hard and soft costs associated with the project. Can also be referred to as the “Capital Cost” TPC = Soft (non-construction) costs + Hard (construction) costs
Total Cost of Occupancy (TCO)	Also referred to as the “Operating Cost” it is the sum of all costs of occupancy operations including: TCO = Debt Service + Municipal charges + Energy/Utility Costs + Maintenance and Repair Costs + Buildings and grounds costs (Where applicable, substitute Lease Cost for Debt Service, etc.)

E. DELIVERABLES

Examples and Exhibits

#1	Example:	INITIAL PROJECT (KICK-OFF) MEETING AGENDA
#2	Example:	PROGRAMMING PHASE PLANNINIG MEETING WITH CORE TEAM AGENDA
#3	Example:	"WORK PLAN"
#4	Example:	PROGRAM STATEMENT TITLE / SIGN-OFF PAGE
#5a	Example:	TABLE OF CONTENTS – Generic projects
#5b	Example:	TABLE OF CONTENTS – Higher Education projects
#5c	Example:	EXPANDED TABLE OF CONTENTS
#6	Example:	CORE TEAM AGENDA
#7	Example:	PROJECT COMMUNICATIONS PROTOCOL
#8	Example:	PRE-WORKSHOP ADMINISTRATIVE PROTOCOL
#9a	Example:	CORE VALUES DISCUSSION FOR WORKSHOP 1
#9b	Example:	VISIONING & GLOBAL QUESTIONS FOR WORKSHOP 1
#9c	Example:	"EXPERIENCE AUDIT" FOR RENOVATIONS FOR WORKSHOP 1
#10	Example:	WORKSHOP 1: CORE VALUES and VISIONING
#11	Example:	POST WORKSHOP SURVEY QUESTIONS
#12	Example:	WORKSHOP 2
#13	Example:	WORKSHOP 3, includes sustainability charette
#14	Example:	WORKSHOP 4, with Physical Plant, Safety, Parking/Transportation, etc.
#15	Example:	WORKSHOP 5
#16	Example:	WORKSHOP 6
#17	Example:	SPACE TABULATION: EXISTING and PROPOSED (very important)
#18	Exhibit:	STATE (DOA) SPACE STANDARDS
#19	Exhibit:	UW SYSTEM SPACE STANDARDS (unofficial)
#20a	Example:	ADJACENCY MATRIX
#20b	Example:	ADJACENCY MATRIX
#21	Example:	GRAPHIC SPACE ANALYSIS
#22	Example:	BUBBLE DIAGRAM
#23	Exhibit:	OFFICE NEEDS QUESTIONAIRE
#24	Exhibit:	CLASSROOM NEEDS QUESTIONAIRE
#25	Exhibit:	LABORATORY NEEDS QUESTIONAIRE
#26	Example:	BASIC COMPILATION OF USER NEEDS
#27	Example:	ROOM DATA SHEET – OFFICES
#28	Example:	ROOM DATA SHEET – CLASSROOMS
#29	Example:	ROOM DATA SHEET – LABORATORIES
#30	Example:	EQUIPMENT SCHEDULE
#31	Example:	REGULATORY REQUIREMENTS AND GUIDELINES
#32	Exhibit:	TYPICAL BUILDING EFFICIENCIES and AVERAGE GSF BUILDING COSTS
#33	Example:	BUDGET SUMMARY
#34	Example:	SCHEDULE SUMMARY

#1 Example: INITIAL PROJECT (Kick-Off) MEETING AGENDA

(For Design or Programming/Pre-Design Projects)

DATE: ___

TO: Project Team Leaders

FROM: ___
DSF Project Manager
voice:, cell:, fax:, email

RE: Project Name
Project Location or Institution
DSF No. 07G3E

INITIAL PROJECT (Kick-Off) MEETING AGENDA

Date, Time Start and Duration, Room No.

PURPOSE: Launch the process for the entire project. Meet key members, set general expectations of scope, budget, and schedule, and instruct consultants on fundamental state processes.

PLEASE BRING: ___

I. INTRODUCTIONS (Go around table, all consultants and key institution users must attend) (5 minutes)

II. PROJECT TEAM (10 minutes)

A. Core Team: Roles and Responsibilities (who does what) (need project directory)
   1) DSF Project Manager
   2) Agency Rep
   3) Institution Rep
   4) User Group Rep
   5) A/E/Consultant Team Leader

B. Other Team Members: Roles and Responsibilities

C. A/E/Consultant Team Qualifications (2-3 minute summary on experience/expertise as it pertains to this project)

III. GENERAL ADMINISTRATIVE PROCEDURES (10 minutes)

A. Project Management and Process Hierarchy:
   1) Wisconsin State Statutes (law), 2) Wisconsin Administrative Code (law), 3) State of Wisconsin Building Commission (SBC) Policies & Procedures Manual, 4) DSF (Statewide) Policy & Procedure Manual for Architects/Engineers and Consultants, 5) DSF (Statewide) Design & Construction Standards, and 6) Institution Design Standards. These documents are established to protect the interest of all stakeholders and vested parties.

B. To achieve single point of responsibility, Consultant and Contractor contracts are with DSF

C. DSF Project Manager (___) is responsible for disbursements of all funds

D. Project Core Team will decide on the final scope, budget, schedule which is then presented to the State Building Commission (SBC)

E. Communications and Constituencies
   1) Six levels of communication: Core Team Meetings, Building Committee meetings (General Project Meetings), Focus (user) Group Meetings, Emails, Telephone calls, password access to WisBuild for accounting/contract details
   2) Communications reminder: because this is a public sector project most information, discussions, and decisions should occur at formal meetings
   3) Acknowledgement that each team member has some obligations to his/her constituency
   4) Routing of Correspondence: Core Team gets copy of meeting notes, key emails, etc.
   5) A/E/Consultant is the project recorder for all meetings and all documents, (all correspondence must have the DSF No.

IV. PROJECT'S MAJOR ISSUES/TOPICS (40 minutes)

A. Capital Budget Status (Program Release Memo, Funding Amount & Sources)
B. History of Project, Definition of the Problem (by User Group leader)
C. Programming:
   1) Confirming or Establishing Major Goals and Objectives
   2) Analysis of Existing Operations and User Program (Occupants/Users and Activities)
   3) Analysis of Existing Physical Conditions, Adaptive Reuse Opportunities
   4) Key issues or concerns by A/E/Consultant, Institution, or User Group
D. Cost: any issues, A/E/Consultant fee concerns
E. Schedule: critical dates, occupancy around construction
F. Concurrent work, adjacent department activities
G. Sustainability goals and/or LEED Rating
H. Tour of Model Facilities / Benchmarking
I. Hazardous Materials: Asbestos Testing, Lead-containing paint, by DSF.
J. Movable Equipment (Need list of possible Agency purchased equipment, Moving of Equip.)
K. Phasing, Traffic Control
L. Presentation drawings for fund raising, to student groups, other uses?

V. A/E CONTRACT CONDITIONS (5 minutes)

A. A/E/Consultant contracts are with DSF: this has financial and legal obligations and risks
B. DSF PM signs as the "Owner" on all A/E prepared documents requiring "Owner's" signature
C. A/E/Consultant is responsible for investigating all related existing building and site conditions
D. 3D CADD and/or BIM: uses, compliance with current DSF Guidelines, standards
E. Expect at least 3 rough drafts of the Program Statement for review and comment
F. Deliverables/review sets:___
G. Importance of Scope, Budget, Schedule being in sync
H. Additional services and/or fees require prior written DSF approval
I. Other work: HVAC Testing and Balancing, DDC Controls, Construction Testing

VI. INFORMATION NEEDED BY A/E/Consultant (10 minutes)

A. Existing record drawings and & specs
B. Facility or Institution Strategic Plan, Facility Vision Plan, Academic Plan, Space Utilization Data, politics, previous studies, or other forces that will affect project development
C. Testing and/or Info on existing building loads and system capacities, i.e., water, electricity, steam, chilled water, gas

VII. PROJECT ACCESS for CONSULTANTS (5 minutes)

A. Access during work hours only (by appointment?):
B. Parking and permits for consultants
C. Temporary office space

VIII. CLOSING (use closing format at end of all agendas) (all meetings shall have an agenda) (5 minutes)

A. Anything else?
B. Action Items & Homework/Assignments for next meeting
   1) A/E/Consultant: Meeting notes, Project Directory, Budget, Schedule, Fee Proposal for Programming Phase, Work Plan, model facilities/benchmarking list
   2) DSF PM: Contract: (No work without a contract)
   3) Institution Rep: As-builts
   4) User Group Rep: Model facilities/benchmarking list
C. Next meeting: Planning Kick-Off Meeting with Core Team: date, time, location

IX. POST MEETING A/E TOUR OF PROJECT AREA

- Check page 2 Header for proper text
- There is a different DSF kick-off meeting agenda for starting those projects which have a previously completed Program Statement. See DSF Policy and Procedure Manual for Architects/Engineers and Consultants

#2 Example: PROGRAMMING PHASE PLANNING MEETING WITH CORE TEAM AGENDA

(follows Initial Project (Kick-off) Meeting)

DATE: ___

TO: Core Team and other key members of the institution

FROM: ___
DSF Project Manager
voice:___ cell:___ fax:___ email:___

RE: ___Project Name
___Project Location
DSF No. __

PROGRAMMING PHASE
PLANNING MEETING WITH CORE TEAM AGENDA

Date, Time start and Duration, Building, Room No.

PURPOSE: Plan for the Pre-Design/Programming *(or Program Verification)* phase, build camaraderie, educate the Core Team on programming procedures to ensure smooth process, draft Work Plan for programming phase

PLEASE BRING: Kick-off meeting minutes, Program Statement, ___

I. INTRODUCTIONS

II. DEBRIEFING of KICK-OFF MEETING and CORE TEAM INTERFACE

A. Debriefing discussion of Kick-off meeting
B. Brief review of desired role and responsibilities to gain optimum interface and efficiency for the Programming or verification process (Pre-Design phase)
C. Expectations of each core team member and his/her "hot buttons"
D. What the A/E/Consultant might expect from user groups, internal politics, external politics, etc.
E. Communication within Core Team
F. Acknowledgement that everyone has a boss and may need to be the messenger

III. AGENCY COMMITTEES SET UP

A. Building Committee(s) membership; (Core Team is also a member of the Building Committee)
B. Focus/User groups membership; if different from Building Committee

IV. COMMUNICATION PROTOCOL

A. Six levels of communication: Core Team Meetings, Building Committee Meetings, User Group Meetings, Emails, Telephone calls. Hallway conversations should be minimized
B. Project Communications Protocol: (see Example)
Need format and assignment of responsible party for proactive and reactive project information disseminated to:
1) Internal Groups (administrators, staff, faculty, students, patients, visitors, institution/campus newspapers)
2) External Groups (alumni, Board of Visitors, business partners, donors, municipality officials, neighborhood groups, municipal newspapers, design and construction publications, etc.)
C. Decision making hierarchy and types of decision allowed (when there are many committees)

V. WORK PLAN

A. Review of "DSF Guide for Developing Program Statements"
B. Task List for Developing the "Program Statement" (see art C.)
C. Strategy or discussion of draft "Work Plan" (see Example)

VI. SCHEDULING OF PROJECT MEETINGS TO ENSURE ATTENDANCE BY:

A. Core Team
B. Building committee (if different from Core Team)
C. Focus/User Groups (if different from Building Committee)
B. Operations and Maintenance groups: Physical Plant, Institution safety/security, Telecommunications, Transportation/Parking/Bikes, Environmental management, etc.
C. Non-institution groups: alumni, donors, Board of Visitors, neighborhood groups, State Historical Society, etc.

VII. A/E/Consultant's FIRST CONDUCTED WORKSHOP or FOCUS/USER GROUP MEETING

A. Desired ambiance / demeanor / style / personality
B. Format: workshop, charette, duration
C. Agenda: topics, outcomes, visioning session, etc.
D. Focus/User groups responsibilities: meeting preparation, role during the meeting, team building
E. Workshop set-up:
- room size to accommodate all attendees
- table/seating set-up (U-shape is generally best for facilitator to engage the group)
- name tags
- displays, easels, wall space
- A/V equipment
- beverages/treats
- breaks
- other resources needed to conduct meeting

VIII. CLOSING

A. Anything else?
B. Assignments/Homework before next meeting:
A/E/Consultant: Work Plan, Workshop Agenda(s)
DSF Project Manager:
Agency Rep:
Institutional Rep:
User Group Rep:
C. Next meeting Date/Time/Purpose: Education Meeting with the Building Committee to educate them on the process for the Pre-Design/Programming phase (*or Program Verification)* Phase

#3 Example: "WORK PLAN"

The Work Plan establishes a due date or duration for each task which is identified (or developed) in the previous section "C. Task List."

TASK	PROBLEM DEFINITION and NEEDS ANALYSIS								PROJECT SOLUTION DESCRIPTION					
	Jan				Feb				Mar				Apr	
	2	9	16	25	1	8	15	22	2	9	16	25	1	8
Organize Core Team	3													
Set Up User Group(s) / Building Committees														
Initial Project Meeting (Kick-off Meeting)		9												
Programming Planning Meeting w/ Core Team		12												
Initial Assessment of Scope, Budget, Schedule			16											
Contract and Fee Negotiation														
Develop Work Plan														
Schedule Internal Building Committee Mtgs														
Schedule Project Meetings														
Schedule Core Team & Executive Meetings														
Distribute and Complete Program Stmt Checklist														
Collect & Analyze Operations & Program Data														
Collect & Analyze Physical Data														
Collect Regulatory Requirements & Guidelines														
Select Members for Focus Groups or Surveys														
Develop questions posed to Focus Groups														
Critique Focus Group Questions														
Put Questions into Priority Order														
Distribute Focus Group Questions in Advance														
Workshop 1: Visioning (exp. audit if Renov)					1									
Workshop 2: activities, functions, relationships							15							
Survey Focus Groups and Building Com.														
Conduct Observations and Personal Interviews														
Benchmarking Tours: on-site or local facilities														
Benchmarking Tours: distant or out of state														
Workshop 3: Detailed info gathering of Dept.									2					
Workshop 4: Detailed info on sec. group/pp											16			
Workshop 5: Present Summarized Data												25		
Develop Space Tabulation: Existing/Proposed														
Develop Adjacency Matrix														
Develop Graphic Space Analysis (all spaces)														
Update Project Budget and Schedule														
Workshop 6: Present to approval groups													1	
Develop Bubble Diag. or Blocking/Stacking Diag.														
For renovation projects, test room/space sizes														
Develop Room Data Sheets														
Equipment List: Movable, Fixed, Special														
Develop design criteria & metrics for success														
Review Draft Program Statement														
Program Statement Sign-off														
Core Team Meetings				x	x		x		x	x	x	x	x	x
Building Committee Meetings					x		x		x		x	x		x
Presentation/Updates to Executive Group				25				22				25		
Presentation to External Groups (list)													1	
Integration presentation: Institution Master Plan														

#4 Example: PROGRAM STATEMENT TITLE / SIGN-OFF PAGE

PROGRAM STATEMENT

For the

PROJECT NAME / TITLE
Location of Project, Department, or Institution
Project Address (if different or needed)
City, Wisconsin
DSF Project Number

Prepared by
A/E/Consultant NAME
A/E/Consultant city, state

Date

Approved by:

Agency Representative (1):_____ Date:_____

Agency Representative (2):_____ Date:_____

DSF Project Manager:_____ Date:_____

A/E/Consultant Representative:_____ Date:_____

#5a Example: TABLE OF CONTENTS - Generic projects

- *Customize Table of Contents to suit the size and complexity of project*
- *The Table of Contents for Program Statements is generally divided into three major topical areas:*
  1. *It documents where you are now, i.e., what are your programmatic and physical deficiencies and needs?*
  2. *It documents where you want to go, i.e., what are the future changes you need to make?*
  3. *It documents the solution to get you there, i.e. what is the solution to correct those programmatic and physical deficiencies and accommodate those changes?*

Project Solution Description

6. SPACE DESCRIPTION *(new and/or remodeled)*……..
- 6.1. Space Tabulation of Existing and Proposed Spaces
- 6.2. Adjacency Matrix
- 6.3. Graphic Analysis of Spaces
- 6.4. Spatial Organization of Activities and/or Rooms (bubble diagram)
- 6.5. Space Type Narrative (all major categories of space)

7. BUILDING and SITE CONCEPT and RECOMMENDATIONS……..
- 7.1. Conceptual Site Plan
- 7.2. Site / Civil / Utilities / Transportation Description
- 7.3. Building Organization Framework Diagram/Blocking/Staking Diagram
- 7.4. Building/Systems Description
  - 7.2.1. Architectural Systems
  - 7.2.2. Structural Systems
  - 7.2.3. Mechanical Systems (includes plumbing, fire protection, HVAC systems)
  - 7.2.4. Electrical Systems (includes telecommunications, security, AV, etc.)

8. DESIGN CRITERIA and METRICS TO ENSURE PROJECT SUCCESS……
- 8.1. Summarized Decisions (Design Principles and Objectives)
- 8.2. Special Design Requirements/Parameters: such as architectural and open space, materials, scale, height, plant materials, utility connections, maintenance and operations requirements, contractor limitations and restrictions
- 8.3. Regulatory Requirements and Guidelines
- 8.4. DSF Sustainability Standards Checklist

9. BUDGET DETAIL……
- 9.1. Total Project Cost (Capital Cost)
  (DSF Budget Worksheet or CSI formatted cost breakdown showing Total Project Cost)
- 9.2. Total Cost of Occupancy (Operating Cost)

10. SCHEDULE / PHASING DETAIL *(if necessary)*.....

11. APPENDIX

Room Data Sheets
Equipment Schedule: Movable, Fixed, Special
Institution Site Plans or Maps
Supporting data: Notes, memos, correspondence, benchmarking or statistical data, budget details, or back-up materials tracing the evolution of the ideas, investigation of options, etc. as needed

#5b Example: TABLE OF CONTENTS – Higher Education projects

- *Customize Table of Contents to suit the size and complexity of project*
- *The Table of Contents for Program Statements is generally divided into three major topical areas:*
  1. *It documents where you are now, i.e., what are your programmatic and physical deficiencies and needs?*
  2. *It documents where you want to go, i.e., what are the future changes you need to make?*
  3. *It documents the solution to get you there, i.e. what is the solution to correct those programmatic and physical deficiencies and accommodate those changes?*

Project Solution Description

6. SPACE DESCRIPTION *(new and/or remodeled)*……
- 6.1. Space Tabulation of Existing and Proposed Spaces, Number of Occupants or Stations
- 6.2. Graphic Analysis of Spaces
- 6.3. Adjacency Matrix
- 6.4. Spatial Organization of Activities and/or Rooms (bubble diagram)
- 6.5. Space Type Narrative (all major categories of space)

7. BUILDING and SITE CONCEPT and RECOMMENDATIONS……..
- 7.1. Conceptual Site Plan
- 7.2. Site/Civil/Utilities Description
- 7.3. Building Organization Framework Diagram / Blocking / Staking Diagram
- 7.4. Building / Systems Description
  - 7.4.1. Architectural Systems
  - 7.4.2. Structural Systems
  - 7.4.3. Mechanical Systems (includes plumbing, fire protection, HVAC systems)
  - 7.4.4. Electrical Systems (includes telecommunications, security, AV, etc)

8. DESIGN CRITERIA and METRICS TO ENSURE PROJECT SUCCESS……
- 8.1. Summarized Decisions (Design Principles and Objectives)
- 8.2. Special Design Requirements/Parameters: such as architectural and open space, materials, scale, height, plant materials, utility connections, operation and maintenance requirements, contractor limitations and restrictions
- 8.3. Regulatory Requirements and Guidelines
- 8.4. DSF Sustainability Standards Checklist

9. BUDGET DETAIL……
- 9.1 DSF Budget Worksheet or CSI formatted cost breakdown showing Total Project Cost

10. SCHEDULE / PHASING DETAIL *(if necessary)*……

11. APPENDIX……
- Room Data Sheets
- Equipment Schedule: Movable, Fixed, Special
- Institution Site Plans or Maps
- Supporting data: Notes, memos, correspondence, benchmarking or statistical data, budget details or back-up materials tracing the evolution of the ideas, investigation of options, etc. as needed

#5c Example: EXPANDED TABLE OF CONTENTS

5. Topography, Drainage, Erosion and Erosion Control
6. Vegetation
7. Subsurface Conditions
8. Hazardous materials, if any
9. Civil Systems & Utilities:
   Electrical Power, expansion capacity
   Gas, expansion capacity
   Sanitary Sewer, expansion capacity, collection system, LS, WWTP
   Storm Water, capacity for expansion
   Water, expansion capacity, Fire Demand, Maintenance examination
   Chilled Water, expansion capacity
   Steam and Condensate, expansion capacity
   Institution Fire Alarm Loop
   Institution Communications (Signal) System, expansion capacity, current location, Tunnels?.
   Institution Coaxial Cable System
   Steam Tunnels
   Box Conduits – Location, structure, condition
   Site Lighting
   Underground Storage Tanks
10. Maintaining utility services and infrastructure during construction
11. Outdoor Activities:
   Plazas
   Kiosks
   Seating
   Special use areas
12. Pedestrians:
   Students, special egress/ingress
   Administration, faculty/staff/employees, special egress/ingress
   Patients, prisoners,
   Visitors, Parents, special egress/ingress
   Bicycles: bike path, bike racks
13. Vehicles:
   Cars: administration, staff, patients, faculty, students, visitors
   Physical plant service: trucks, size
   Mail Services: institution's, private
   Vans: student staff transportation
   Vendor loading/shipping/receiving, dock size
   Buses: institution's, city
   Bus Drop Off, bus shelter pad
14. Parking
   Lots location
   Underground Ramp, number of stalls
   Drop off and passenger loading: cars, buses, vans
   Parking control equipment: Payment equipment
15. Service/Delivery/Shipping/Receiving
   Dock Access
16. Waste Removal
   Dumpster
   Garbage collection
17. Security
   Blue Phones
18. Wayfinding:
   Building Sign
   Other signs, bus stop, etc.
19. Special Events, Features, Accommodations
   Vehicles,
   Pedestrians,
   Temporary parking,

2. Building/Systems: Existing Conditions and Deficiencies

1. Architectural
2. Structural
5. Fire Suppression
3. Plumbing
4. HVAC
6. Electrical
7. Telecom/Audio/Visual
8. Security
9. Functional Review
   a. Space functionality, suitability, adjacency issues
   b. Energy analysis
   c. Accessibility
   d. Site Use, Circulation, Transportation
   e. Visual Impact

3. Regulatory Requirements and Guidelines

1. City Zoning, Municipal regulations for streets, etc.
2. DSF (DSF Sustainability Guidelines, DSF Master Specifications, etc)
3. Agency or Institution Design Guidelines
4. Quality Standards for Typical Spaces
5. Applicable Codes (Building, Life Safety, Fire, Handicap Accessibility, Elevator, Energy, Plumbing, HVAC, Electrical, Fuel and Gas, etc.)
6. Environmental Health and Safety Standards, Animal Care
7. Ex: Crime Prevention Through Environmental Design (CPTED)

4. Special Planning Issues *(examples)*

1. EIS, Environmental groups
2. Historic Preservation: Wisconsin Historical Society Requirements
3. Hazardous Materials abatement and remediation
4. Fixed Equipment
5. Movable Equipment
6. System Furniture
7. Way finding, interior signage

Project Solution Description

5. SPACE DESCRIPTION……

1. Space Tabulation: Existing and Proposed
All Rooms, spaces, occupants, and users *(See Deliverables, Exhibit)*

2. Adjacency Matrix

3. Graphic Analysis of Space
(matrix which graphically showing relative sizes of spaces)

4. Spatial Organization of Activities and/or Rooms (bubble diagram)

5. Space Type Narrative (all major categories of space)

6. DESIGN CRITERIA and METRICS to ENSURE PROJECT SUCCESS……

1. List of major issues needing resolution or tradeoffs which will affect the physical design and must be made prior to design
2. Statement of overall spatial organization of activities to accommodate major functional objectives
3. Major criteria / metrics for success:
   - Aesthetic
   - Operational
   - Organizational
   - Political
   - Financial
4. Benefits of Success

5. Special Design Requirements: architectural and open space, materials, scale, height, plant materials, utility connections, contractor limitations and restrictions
6. DSF Sustainability Standards Checklist

7. HEALTH AND SAFETY CONSIDERATIONS……

8. LEED (or DSF SUSTAINABILITY) MATRIX DRAFT (when LEED certification is being pursued)…

1. Sustainable Sites
2. Water Efficiency
3. Energy & Atmosphere
4. Materials & Resources
5. Indoor Environmental Quality
6. Innovation in Design

9. DESCRIPTION of SITE/CIVIL/UTILITIES and/or CONCEPT SITE PLAN……..

1. Side walks
2. Driveways, paving
3. Dock
4. Building Service Lines:
   - Electrical Power
   - Gas
   - Sanitary Sewer
   - Storm Water
   - Water
   - Chilled Water
   - Steam and Condensate
   - Campus Fire Alarm Loop
   - Campus Communications (Signal) System,
   - Campus Coaxial Cable System
   - Steam Tunnels
   - Site Lighting
   - Meters: Gas, Water, Electric
   - Fire hydrant
   - Fire connection
5. Landscaping
   - Plantings
   - Sodding
   - Existing Plants to remain
   - On-site Stormwater Management

10. CONCEPTUAL MASSING PROGRAMS DIAMGRAMS……
(roughly drawn to test site and building size assumptions)

11. OPERATIONS & MAINTENANCE……
(*very brief, primary detail in design phase)*

1. Hours of Operation
2. Staff Economies attributed to potential floor plan configurations, management techniques
3. Security Management
4. Operations & Maintenance Criteria to Match Owner's Needs and Expectations
5. Quality Requirements for Materials and Construction
6. Special Health and Hygiene, related to LEED EAQ
7. Training for Owner's Personnel
8. Functional Testing of MEP Components

12. CONSTRUCTION MEANS & METHODS……
(very brief assessment, primary analysis will occur in the design phase)

1. Demolition
2. Staging
3. Storage of materials
4. Contractor Parking Proximity

5. Material / Truck Deliveries
6. Occupancy of site during construction
7. Maintaining utility services and MEP systems during occupancy of existing SoHE building
8. Temporary Rerouting of pedestrians and vehicles during construction: code issue
9. Hoisting: exterior, interior
10. Recycling of materials

New page

13. BUDGET DETAIL……
(Project Budget Worksheet, minimum)

14. SCHEDULE / PHASING DETAIL (if necessary)……..

15. APPENDIX……

Room Data Sheets: (Detailed Physical Requirements for every different type of space or room. If necessary, show suggested prototypes for some major spaces, e.g., common classroom, office, conference room, laboratory)

Equipment List: Movable, Fixed, Special

Existing Site Plan and/or Utility Plan (8 1/2 x 11)

Budget detail

Schedule detail

Life Cycle Costing (if any)

Supporting data: Notes, memos, correspondence, benchmarking or statistical data, budget details or back-up materials tracing the evolution of the ideas, investigation of options, etc. as needed

#6 Example: CORE TEAM AGENDA

(standing agenda)

Project:
Project Location:
DSF Project Number:

Date/Time of Meeting:
Required Attendees: Core Team and …
Bring to Meeting:

Purpose of Meeting:

1. Process Issues:
   Ex:
   Feedback from past activities/meetings
   Communication issues
   Arrange Models of excellence tours
   Set-up Interviews/Observations with the following groups
   Set-up interviews and meetings to discuss project components

2. Scope Issues
   Ex:
   Goals for Project
   Existing Condition verification update
   Classroom Utilization info
   Resolving disparate points of view related to space needs

3. Budget Issues

4. Schedule Issues

5. Outstanding / Lingering Issues List

6. Homework/Assignments

7. Next meeting
   Date:
   Time:
   Location:
   Purpose:

#7 Example: PROJECT COMMUNICATIONS PROTOCOL

For very large projects, i.e., those exceeding $25 million, it is suggested that a formal communications/ information dissemination protocol be established to ensure accurate and appropriate project information is being disseminated and published.

Date:

Project Name:
Project Location:
DSF Proj. Number:

Subject: Project Communications Protocol

PARTY	COMMUNICATIONS RESPONSIBILITY
DSF Project Manager	Responsible for the dissemination of information and the responses to questions to and from the State of Wisconsin, Division of State Facilities. General media requests should be submitted to DOA Secretary's office. Respond to Design and Construction Trade Publications as needed.
Agency Central Office Rep	Responsible for the dissemination of information and the responses to questions to and from the Agency's Administration. Responsible for the dissemination of information and the responses to questions to and from the Agency's Board.
Institution Planning Office Rep	Develop and maintain a web location for posting of relevant project information. Requests from the local media, including the institution newspaper, for project information, comments, and/or interviews shall be forwarded to ____, who will forward to ____, Vice Chancellor of University Relations. ____ will be responsible for dissemination of information and the responses to questions to and from Institution Administrators and other Institution organizations.
Design Team PIC	Requests to the Design Team from trade publications for basic project information should be forwarded to ____ of ___ABC architects.
Core Team	Responsible for the dissemination of information and the responses to questions to and from constituency groups they represent.
Building Committee Chair	Responsible for the dissemination of information and the responses to questions to and from the constituency groups they represent.

#8 Example: PRE-WORKSHOP ADMINISTRATIVE PROTOCOL

Purpose: To aid the User Group/Institution/Agency in planning and preparation for Charette/Workshops and beyond.
To answer potential inquiries from the User Group/Institution/Agency. Consultants need to respond noting that some inquiries are more time-sensitive than others.

1. What is your specific itinerary for the site reconnaissance time blocks? What site-specific data do you need to conduct the site reconnaissance? How do you plan to get around? Will you want escorts? Institution personnel can respond to questions that may arise in particular locations. We also may need to coordinate access to some of the restricted areas you wish to tour.

2. The following groups expect and require a specific constituent-guided site visit: Housing, Recreation/Athletics, Union/Food Service, Prison Cells, and Health Services. Since the work session with these groups on ____(date) will not include this, when do you want to accomplish this?

3. Besides leading project meetings for the Institution's Core Team and Building Committee, what is the itinerary and Work Plan for special consultants ___? What data and staff support will they be looking for during their visit? What specific locations will they want to see related to parking and transportation? When can the Core Team and Building Committee expect to have an agenda for the Workshops and meetings? Also, the Building Committee expects to receive "homework" prior to the meeting that will allow them to prepare for a productive and efficient interaction with your design team.

4. Clarify expectations regarding financial planning--who will you need to meet with and what data are you requesting? Who will introduce the templates to us?

5. What are the agendas for the different Workshops?

6. Face time: Will you be back in ____months? In particular, expressed concern that there be a "touching base" before ___ when you indicate that you will have something preliminary to share with us.

7. On UW projects: We want to plan for early semester forums for the campus community in ____. OK to proceed with this? We will need dates for mid to late ___.

#9a Example: CORE VALUES DISCUSSION for WORKSHOP 1

Before embarking on the project, it is wise for the Design Team to learn and understand the current Core Values of the agency group for which it is providing services. This should be done before the Visioning segment of the first Work Shop.

The Building Committee, Focus Groups and other invited institution members should have an:

a. Open discussion and consensus on Core Values embodied by administration/management and staff
b. Open discussion and consensus on Core Values embodied by the entire institution or department

Sample: CORE VALUES MATRIX

VALUE	VALUE COMPONENT	GOALS	FACTS	NEEDS	IDEAS
HUMAN	Functional				
	Social				
	Physical				
	Psychological				
ENVIRONMENTAL	Site				
	Climate				
	Context				
	Resources				
	Waste				
	Sustainability				
CULTURAL	Historical				
	Institutional				
	Political				
	Legal				
TECHNOLOGICAL	Growth				
	Change				
	Permanence				
ECONOMIC	Finance/Sources				
	Construction				
	Operations				
	Maintenance				
	Energy				
	Sustainability				
AESTHETIC	Form				
	Space				
	Color				
	Meaning				
SAFETY	Structural				
	Fire				
	Chemical				
	Personnel				
	Criminal				
	Traffic				
OTHER					

Note: Determination of Core Values is especially important as a first step on institution-wide Master Plan projects.

#9b Example: VISIONING & GLOBAL QUESTIONS for WORKSHOP 1

Questions posed to the Building Committee and Focus Groups should be open ended – requiring an essay answer.

1. What is the experience of and how does each of the following interact with ____ institution administrators, faculty, staff, students, patients, visitors, family, and alumni.

2. How does ____ work to build a Community among all users of the facility … administrators, faculty, staff, students, patients, visitors, family, alumni

3. How can ____ support / nurture collaboration and/or interdisciplinary knowledge and study within ____

4. How are School – Community (Outreach) partnerships supported by ____. How does ____ engage the community?

5. How does ____ increase the School of ____ global presence?

6. What would be the ideal environment for you to successfully perform your work tasks?

#9c Example: "EXPERIENCE AUDIT" TOPICS for RENOVATION PROJECTS for WORKSHOP 1

Building Committee and Focus Groups to offer viewpoints on:

1. Core values
   a. Open discussion and consensus on core values embodied by this project group (i.e., department, administrators, management, staff, occupants, user group, students, and etc.)
   b. Open discussion and consensus on core values embodied by the entire agency or institution

2. Place:
   a. Location (analysis of building location within institution or analysis of space locations within building)
   b. Exterior appearance
   c. Exterior/site circulation/accessibility
   d. Interior environment
   e. Interior circulation
   f. Signage / Way finding
   g. Functionality
   h. Indoor/outdoor connection

3. Products/Services (current)
   a. Communication of services and events
   b. Products/services match needs of customers
   c. Technology accessibility/utility
   d. Trends and Trendsetting

4. People (existing staff/users)
   a. Welcoming style
   b. Personalized service, does it anticipate needs?
   c. How people can enhance the facility?

The core team and building committee are encouraged to tour the building or spaces to be renovated.

#10 Example: WORKSHOP 1: CORE VALUES & VISIONING

PROJECT:
Name:
DSF No.
A/E No.

MEETING:
Subject: **Agenda for Workshop 1 – Core Values - Visioning – Global Ideas**
Date:
Time:
Location:
Req'd Attendees:

PURPOSE: Learn of core values, global aspirations, goals, and expectations of the project and organization. Help discover the root problem to be solved.

NEXT STEPS: Focus group approach to gain insight of general needs of each major work unit or department

8:00 – 8:05 **Introductions**
- Name, Department, Why attending
- Icebreaker Question

8:05-8:15 **Workshop Overview**
- Purpose
- Ground Rules

8:15 – 8:45 **Core Values**
- Who & what we are today

8:45 – 9:15 **Project Background**
- History
- Master Plan/Program Assumptions
- Current Program Status
- Efficiency Goals (net/gross area)
- New Program Considerations
- Open Issues

9:15 – 10:00 **Visioning – Global Goals – Dream facility**
- Image
  - Historic, Campus, Public
- Flow
  - Inside-Outside
  - Approach-Procession
  - Traffic
- Relationships
- Creating Community
  - Social
- Space
  - Interior, Exterior
  - Informal Interactive
- Materiality / Transparency

10:00 **Break**

10:15 -10:30 **Practical Considerations**
- Site Program Components
- Site Options
- Institution Planning Issues
- Opportunities and Constraints

LEED/Sustainable Ideas, Strategies

10:30 – 10:45 **Schedule and Budget**
- Project Budget Guidelines
- Schedule Overview/Options
- Cost Review Process

10:45 – 11:15 **Function**
- Descriptions
- Operation
- Visitors

11:15 – 11:45 **Space Needs**
- Space Types
- Spaces Sizes
- Shared Spaces

11:15—11:30 **Flow**
- Internal Staff
- Public Flow

11:45 – 12:00 **Adjacencies**
- Ideal locations – Exterior & Interior
- Ideal Neighbors

12:00 NOON **LUNCH BREAK**

1:00 – 1:30 **Function**
- Descriptions
- Occupants

1:30- 1:45 **Break**

1:45 – 2:15 **Space Needs**
- Space Types
- Spaces Sizes
- Shared Spaces

2:15—2:45 **Flow**
- Students
- Other Activities

2:45-3:15 **Adjacencies**
- Ideal Locations – Exterior - Interior
- Ideal Neighbors

3:15-4:00 **MEP Needs**
- Plumbing
- HVAC
- Electrical
- Telecom
- Audio/Visual

4:00 **Wrap Up**
- Pluses and minuses of this Workshop
- Next steps
- Homework/Assignments
- Tabled items or special issues to be revisited (in log)

#11 Example: POST WORKSHOP SURVEY QUESTIONS

Purpose: To determine the effectiveness of the Workshops and then make adjustments to subsequent Workshops

FOCUS GROUP NAME:						
Participant	In which focus group(s) did you participate? (Please list all that apply)	How well did we prepare you for the focus group Workshop with information in advance?	How would you evaluate the facilitation of the group discussion?	Did you feel you had an adequate opportunity to express your ideas during the focus group?	What ideas were you not able to express fully in the focus group: (Open ended response)	What suggestions would you have for improving the focus-group process? (Open ended response)

#12 Example: WORKSHOP 2

PROJECT
Name:
DSF No.
A/E No.

MEETING
Subject: **Agenda for Workshop 2 – Continuation of analysis**
Date:
Time:
Location:
Req'd. Attendees:

PURPOSE: Workshop 2 is a continuation of our analysis and information collection of various components that collectively comprise ____. The goal of the meeting is to gather various perspectives through an open dialog, not to necessarily resolve disparate perspectives. The A/E will engage the focus groups in discussion on the future vision of the each focus group and their relationship within the overall ____ community. Some specific details regarding current function and spatial needs will be discussed as a platform for understanding and discovering future goals.

NEXT STEP: In the week following the workshop, we will synthesize and provide meeting minutes of our discussion for the focus group's review and comment. We will supplement our analysis of the focus group discussion through observation and interviews with staff or faculty. During Workshops #4 and #5 the A/E will provide their interpretation and response to all information gathering through diagrams, space tabulations and discussion.

Thursday, January 4, 20__
Morning

8:00 - 8:45 **Core Team Planning** ("Kick-Off" of Workshop)
- o Review of days ahead
- o Last minute updates
- o General discussion

8:45 - 9:00 A/E/Consultant Set Up

Focus (User) Groups

9:00 - 10:00 A. **Centers & Project Spaces** (60 minutes)
- o All Centers
- o Outreach Programs
- o Research Spaces

10:05 – 11:05 B. **Instructional and Meeting Spaces** (60 minutes)
- o Classrooms
- o Seminar
- o Conferences Rooms
- o Big Lecture Hall
- o Breakout spaces

11:05 – 11:20 **Break**

11:20 – 12:00 C. **Storage** (40 minutes)
- o Lockers
- o Hoteling
- o Data Archives
- o File Storage

12:00 - 1:00 **Working Lunch**

D. **'Building Community'** (60 minutes)
- Community Spaces
- Social/spontaneous Interaction spaces
- Student Display
- Other Display

Afternoon

1:05 - 1:45 E. **Student Academic Affairs and Student Development** (40 minutes)

1:50 - 2:50 F. **Graduate Education and Development** (60 minutes)

2:50 – 3:00 Break

3:00 - 3:40 G. **Department Centers and Administrative Space** (40 minutes)

3:40 - 4:20 H. **Technology** (40 minutes)
- Teaching
- Research
- Outreach
- Distance Learning
- Wireless

4:20 - 5:00 I. **Public Access to Building** (40 minutes)
- Security Issues
- Main entrance access and drop-off
- Continuing Education
- Outreach Programs
- Design Gallery and Functions

5:00 – 8:00pm Dinner as a group, if desired to build camaraderie

---

Friday, January 21, 20__

Morning

'More Focused' Groups

8:00 - 8:45 **Design Gallery** (45 minutes)

8:45 - 9:30 **Faculty Studio Space** (45 minutes)

9:30 - 10:15 **Design Studies / Instructional Spaces** (45 minutes)

10:15 –10:30 Break

10:30- 11:15 **Annex** (45 Minutes)

11:15- 12:00 **Student Academic Affairs** (45 minutes)

12:00 - 1:00 Lunch

Afternoon

1:00 – 1:45 **Special Collections** (45 minutes)

1:45 - 2:30 **Library** (45 minutes)

2:30 - 3:00	**Break / Clean up**
3:00 – 3:45	**Wrap Up** Pluses and minuses of this Workshop Next steps Homework/Assignments Tabled items or special issues to be revisited
3:45-4:00 PM	**Core Team Wrap Up**

end

#13 Example: WORKSHOP 3

PROJECT
Name:
DSF No.
A/E No.

MEETING
Subject: **Agenda for Workshop 3 – Focus Groups, Sustainability**
Date:
Time:
Location:
Req'd Attendees:

PURPOSE: Workshop 3 is a continuation of our analysis and information collection of various components that collectively comprise ____. The goal of the meeting is to gather various perspectives through an open dialog, not to necessarily resolve disparate perspectives. The A/E will engage the focus groups in discussion on the future vision of the each focus group and their relationship within the overall ____ community. Some specific details regarding current function and spatial needs will be discussed as a platform for understanding and discovering future goals.

NEXT STEPS: In the week following the workshop, we will synthesize and provide meeting minutes of our discussion for the focus group's review and comment. We will supplement our analysis of the focus group discussion through observation and interviews with staff or faculty. During Workshops 4 and 5 the A/E will provide thier interpretation and response to all information gathering through diagrams, space tabulations and discussion.

Monday, February 17, 20__

7:30 - 8:00	A.	**Core Team Meeting**
8:15 - 9:30	B.	**Building Community - Focus Group** o Components that build community o Components that preclude community o Program support
9:35 - 10:25	C.	**Research Collaboration Areas - Focus Group** o Connectivity o Model o Ideals
10:30 – 11:25	D.	**Design Gallery - Focus Group** o Visibility o Adjacencies o Ideals
11:30 -12:00	E.	**Family Interaction Lab Tour**
12:00 -1:05		**Break - On your Own**
1:05 - 2:00	F.	**Student Academic Affairs: Visionary - Focus Group** o Experience o Interaction o Adjacencies o Ideals
2:00 – 2:55	G.	**Faculty Studio - Focus Group** o Visibility

		o Privacy o Adjacencies
3:00-3:55	H.	**AV Observation Lab - Focus Group** o Ideals o Users
4:00 – 4:30	I.	**Building Committee Wrap-up**
4:30 – 5:00 p.m.	J.	**Core Team Discussion**

Thursday, February 01, 20__

7:30 - 8 :00	K.	**Building Committee Planning**
8:00 - 9:00	L.	**Safety and Security - Focus Group**
9:05 - 10:05	M.	**Service and Support - Center Directors and Staff Identified by user group** o Functions requiring administrative support o Flexibility
10:15 - 11:30	N.	**Healthy Building – Building Committee** o What makes a healthy building for all? o What spaces or aspects provide renewal for the occupants?
11:35 - 12:20		**Break – On your Own**
12:20 - 3:05	N.	**LEED / DSF Sustainability Goal Setting - Building Committee and Stakeholders** An integrated design process involves incorporating sustainable and LEED goals early on. This brainstorming by A/E/Consultant, user group, and DSF is done to encourage the exchange of ideas by all and to begin exploring the sustainable aspects of the new facility. Discussion of Total Cost of Occupancy.
3:05 - 3:20	O.	**Team Wrap Up/Building Committee Discussion** Pluses and minuses of this Workshop Next steps Homework/Assignments Tabled items or special issues to be revisited
3:20 - 3:55	P.	**Core Team Wrap up**

#14 Example: WORKSHOP 4
With Physical Plant, Safety, Parking/Transportation, etc.

PROJECT
Name:
DSF No.
A/E No.

MEETING
Subject: **Agenda for Workshop 4 – Physical Plant, Safety, Parking/Transportation, Sustainability, IT, hazardous materials, Institution Planners**
Date:
Time:
Location:
Req'd Attendees:

PURPOSE: This meeting is a continuation of our programming analysis and information collection of various components that collectively comprise user/agency group. The goal of the meeting is to gather various perspectives through an open dialog, not to necessarily resolve disparate perspectives. A/E will engage the participants to gather their input and to discuss their relationship within the overall user group community. Some specific details regarding current functions and systems will be discussed as a platform for understanding and discovering future goals.

NEXT STEPS: In the week following the workshop, we will synthesize and provide meeting minutes of our discussion for the group's review and comment. We will supplement our analysis through follow-up discussions with specific staff as necessary.

Wednesday, February 14, 20__

9:45 - 10:30 AM	A.	**Custodial/Maintenance** o Including: waste disposal/recycling o shipping/receiving o keying/locks
10:30 - 11:15	B.	**Transportation/Parking and ADA** o Including bicycles/mopeds
11:15 - 12:00	C.	**Site/Landscaping** o Including stormwater o Snow removal
12:00 -1:00 PM		**Break**
1:00 - 2:00	D.	**IT, Telecommunications, A/V** o Including site telecom
2:00 – 2:45	F.	**Electrical/Lighting Systems and Elevator** o Including site primary service
2:45 - 3:30	G.	**Plumbing/Fire Suppression/HVAC Systems** o Including site water and sanitary o site steam and chilled water
3:30-4:30	H.	**Institution or District Planners** ○ Institution Wide viewpoints on the above

#15 Example: WORKSHOP 5

PROJECT
Name:
DSF No.
A/E No.

MEETING
Subject: **Agenda for Workshop 5**
Date:
Time:
Location:
Req'd Attendees:

PURPOSE: Workshop 4 will be the first of two interpretation and response Workshops transitioning from analysis and information gathering into implementation of program strategies. The first day will provide feedback to each Focus Group presenting summaries and diagrams regarding types of spaces, adjacencies, and organization of the program to respond to ideas brought up during Focus Group Sessions earlier in the process.

The second day, after the completion of the Focus Group Feedback sessions, will provide an overview of ___ program requirements with discussion on organization, adjacency, and special space considerations through diagrams.

NEXT STEP: The A/E/Consultant will begin "testing" ideas about space that support the vision the user/agency defined in the information gathering process.

Thursday, March 15, 20__

7:30 - 7:55	A.	**Core Team Meeting**
8:00 - 9:30	B.	**Research & Project Spaces - ADDITIONAL DISCUSSION GROUP SESSION – RESEARCH SPACES**
9:30 - 9:40		**Break**
9:40 - 10:10	C.	**AV Observation Lab**
10:10 - 10:40	D.	**Instructional Spaces**
10:40 - 11:40	E.	**Service and Support**
	F.	**Administrative Functions and Spaces**
	G.	**Storage**
11:40 – 12:10	H.	**Annex**
12:10 – 1:10		**Break**
1:10 - 2:10	I.	**Special Collection w/ Library w/ Student Gallery**
2:10 - 3:10	K.	**Student Studies / Instructional Spaces**
	L.	**Faculty Studio**
3:10 – 3:40	M.	**Graduate Education and Development**
3:40 – 4:10	N.	**Student Academic Affairs**
4:10 – 4:50	O.	**Building Community**

Friday, March 16, 20__

7:30 - 8:00	P.	**Core Team meeting, if needed**

8:00 – 8:50	Q.	**Building Committee Wrap-up from Previous**
8:50 – 9:00		**Break**
9:00 – 9:20	R.	**Review Goals**
9:20 – 9:40	S.	**Site Review**
9:40 – 10:00	T.	**Program Review**
10:00- 12:00	U.	**Program Requirements: organization, adjacencies, Considerations** This will be a discussion on the larger adjacency and organizational strategy. Any inconsistencies or conflicts will be discussed and next steps outlined to get to resolution.
12:00 – 1:00		**Facility Tour**
1:00 - 2:00		**Break**
OR 1:30 - 2:40	ADDITIONAL DISCUSSION GROUP SESSION – RESEARCH SPACES	
2:00 – 2:15	V.	**Wrap Up** Pluses and minuses of this Workshop Next steps Homework/Assignments Tabled items or special issues to be revisited
2:15 - 3:00	W.	**Core Team Wrap up**

#16 Example: WORKSHOP 6

PROJECT
Name:
DSF No.
A/E No.

MEETING
Subject: **Agenda for Workshop 6**
Date:
Time:
Location:
Req'd Attendees:

PURPOSE: Workshop 6 will be the first of two interpretation and response Workshop transitioning from analysis and information gathering into implementation of program strategies. The first day will provide feedback to each Focus Group presenting summaries and diagrams regarding types of spaces, adjacencies, and organization of the program to respond to ideas brought up during Focus Group Sessions earlier in the process.

The second day, after the completion of the Focus Group Feedback Workshop, will provide an overview of __ program requirements with discussion on organization, adjacency and special space considerations through diagrams.

NEXT STEP: ___ will begin "testing" ideas about space that support the vision of ____ defined in the information gathering process.

Wednesday, April 12, 20__

8:00 - 8:30	A.	**Core Team Meeting**
8:30 – 12:00	B.	**Space Tabulation Review**
12:00 – 12:30	C.	**Room Data Sheet Overview**
12:30 – 1:30	Break	
1:30 – 4:00	D.	**Program Requirements / Adjacency Diagrams:** **- Center for Special Studies** **- Design Gallery** **- Tech Core** **- SAA** **- Dean's Suite & Administration** **- Design Studies**

Thursday, April 13, 20__

8:00 - 10:30	E.	**Program Requirements / Adjacency Diagrams cont:** **- Administrative adjacencies** **- Research, Department, Centers Space adjacencies & Center for Excellence in Physical Studies - Labs**
10:30 - 12:30	F.	**Program Organizations Overall: Blocking and Stacking**
12:30 – 1:30	**Lunch**	
1:30 - 2:30	G.	**Project Schedule review**

Project Budget review

2:30 – 3:00	H.	**Building Committee Wrap up** **- Tour discussion** Pluses and minuses of this Workshop Next steps Homework/Assignments Tabled items or special issues to be revisited
3:00 – 4:00	I.	**Core Team Wrap up, if needed**

#17 Example: SPACE TABULATION: EXISTING and PROPOSED

The Space Tabulation is a listing of each identifiable and assignable space to be provided by the project. It is considered one of the most important data forms in the Program Statement. The spaces should be arranged by organizational units, functional entities, or combination that clearly identifies the spaces that must be designed into the facility or addressed by the project. Separate summary lines can be grouped to reflect proximities required for efficient operations.

Below is the format (preferably in Excel for large projects) that needs to be completed for all existing Agency on-site and, if applicable, all off-site spaces related to the program. The purpose is to help the Agency understand what space they have now, how many occupants use that space, and how much space they are gaining by any expansion or new building. This Space Tabulation will also be used by DSF Capital Budget staff for their review of justification for additions, renovations, and new buildings.

STEP 1: EXISTING SPACE CALCULATIONS: (For renovation and new addition projects)
At the beginning of the Programming phase, i.e. during Data Collection, list all Existing Assignable Square Feet (ASF) and indicate Gross Square feet to calculate the Efficiency Factor.

STEP 2: PROPOSED SPACE CALCULATIONS:
After analysis of occupants/users and activities/functions, list all Proposed Assignable Square Feet and Non-Assignable Square Feet. Use an appropriate Efficiency Factor to determine proposed Gross Square Feet.

By Organizational Unit

ASSIGNABLE SPACE			**EXISTING**					**PROPOSED**				
Room No.	Room Type	Room/Space Name or Current Function	No. of Occup.	ASF per Occ.	ASF per Room	No. of Rms.	Total ASF	No. of Occ.	ASF Per Occ.	ASF Per Room	No. of Rms	Total ASF
	*1, *2											
TOTALS												

NON ASSIGNABLE SPACE			**EXISTING**					**PROPOSED**				
Room No.	Room Type	Room/Space Name or Current Function			SF Per Room	No. of Rms	Total NASF			SF Per Room	No. of Rms	Total NASF
		Ex: Large Lobby										
		Ex: Mechanical Room										
		Ex: Telecom Closet										
TOTALS												

	EXISTING					**PROPOSED**				
	No. of Occ.			No. of Rms	Total ASF +Total NASF = GSF	No. of Occ.			No. of Rms.	Total ASF +Total NASF= GSF
GRAND TOTAL										

EFFICIENCY FACTOR (E.F.) = ASF / GSF

*1 "Room Type" examples:
Office: Shared Office, Open Office
Classroom: Seminar Room, Classroom, Lecture Hall
Laboratory: Lab Instructional, Lab Research, Lab Preparations, Lab Storage

*2 HEGIS Room Use Codes for UW Projects, Optional

#18 Exhibit: STATE (DOA) SPACE STANDARDS

Ref:

Code	Position Category Types	Constructed'(C) or Open Office (O)	Example of Job Titles Within Category	Allocated SF Systems Furniture	Allocated SF Conventional Furniture
A	Executive	C	Department Secretary Agency Head	216	216
B	Administrator	C	Deputy Secretary Executive Assistant Secretaries/Assistant Division Administrator	192	192
C	Managers	C	Deputy Division Administrator	160	160
D	Managers & Supervising Professionals	C	Bureau Director	144	144
E	Supervising Professionals	O	Section Chief Job Services Supervisor Assistant/Deputy Bureau Director	96	100
F	Architecture & Engineering	O	Employees that require additional space for large plan layouts: Engineer Architect Landscape Architect Building Code reviewers	72	81
G H	Professional General & Paraprofessionals Professional General Requiring Counseling Space	O	See attached list. Employees who must insure confidentiality and have direct access to conference rooms: Probation & Parole Functions Human Resource EAP/AAO	64 to 96	81 to 120
I	Professional General Requiring Immediate Confidentiality	C	Employees that must insure confidentiality and who do not have direct access to conference rooms: Attorneys District Supervisor District Director Probation & Parole Functions Human Resource EAP/AAO	120	120

#19 Exhibit: UW SYSTEM SPACE STANDARDS (unofficial)

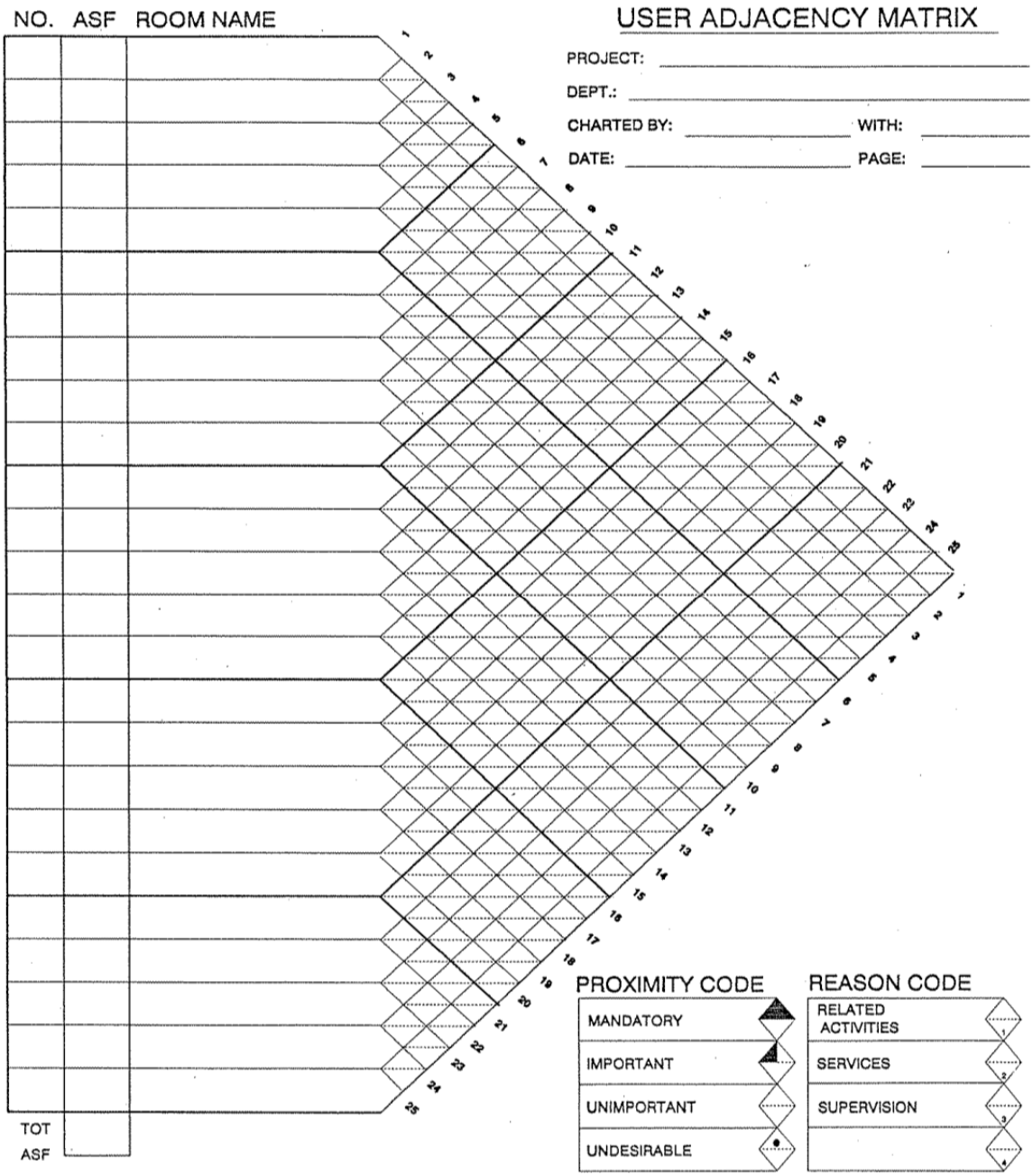
Note: Current UW space standards should be obtained directly from the University of Wisconsin System Administration.

UW-System Office Planning Guideline

Title	Area	Notes
President	500	400 office + 100 in-office conference
Vice President	400	300 office + 100 in-office conference
Assoc/Asst VP	200	150 office + 50 in-office conference
Board Secretary	200	150 office + 50 in-office conference
General Counsel	200	150 office + 50 in-office conference
Director (closed office)	150	modular furniture
Staff, confidential (closed office)	135	modular furniture, 120 + 15 for tech
Staff (open office)	80	modular furniture
Clerical	80	modular furniture
File (1/clerical station)	90	1/clerical station
Reception (1/area)	100	1/area
Chancellor	400	300 office + 100 in-office conference
Vice Chancellor	300	200 office + 100 in-office conference
Asst/Assoc Chancellor	200	150 office + 50 in-office conference
Dean	185	135 office + 50 in-office conference
Chair/Faculty	135	standard furniture
Chair/Faculty	120	modular furniture
Director (closed office)	120	modular furniture
Staff, confidential (closed office)	120	modular furniture
Staff (open office)	80	modular furniture
Clerical	80	modular furniture
File (1/clerical station)	90	1/clerical station
Reception (1/area)	100	1/area
File Planning Areas		
Letter File Cabinet	7	18" x 52"
Legal File Cabinet	7	20" x 52"
Book Case	3	12" x 36"
42" Lateral File	11	42" x 36"
Storage Cabinet	8	36" x 30"

#20a Example: ADJACENCY MATRIX

Option 1:
This tool is the basis for the actual floor plan configuration, which is designed by the Architect.



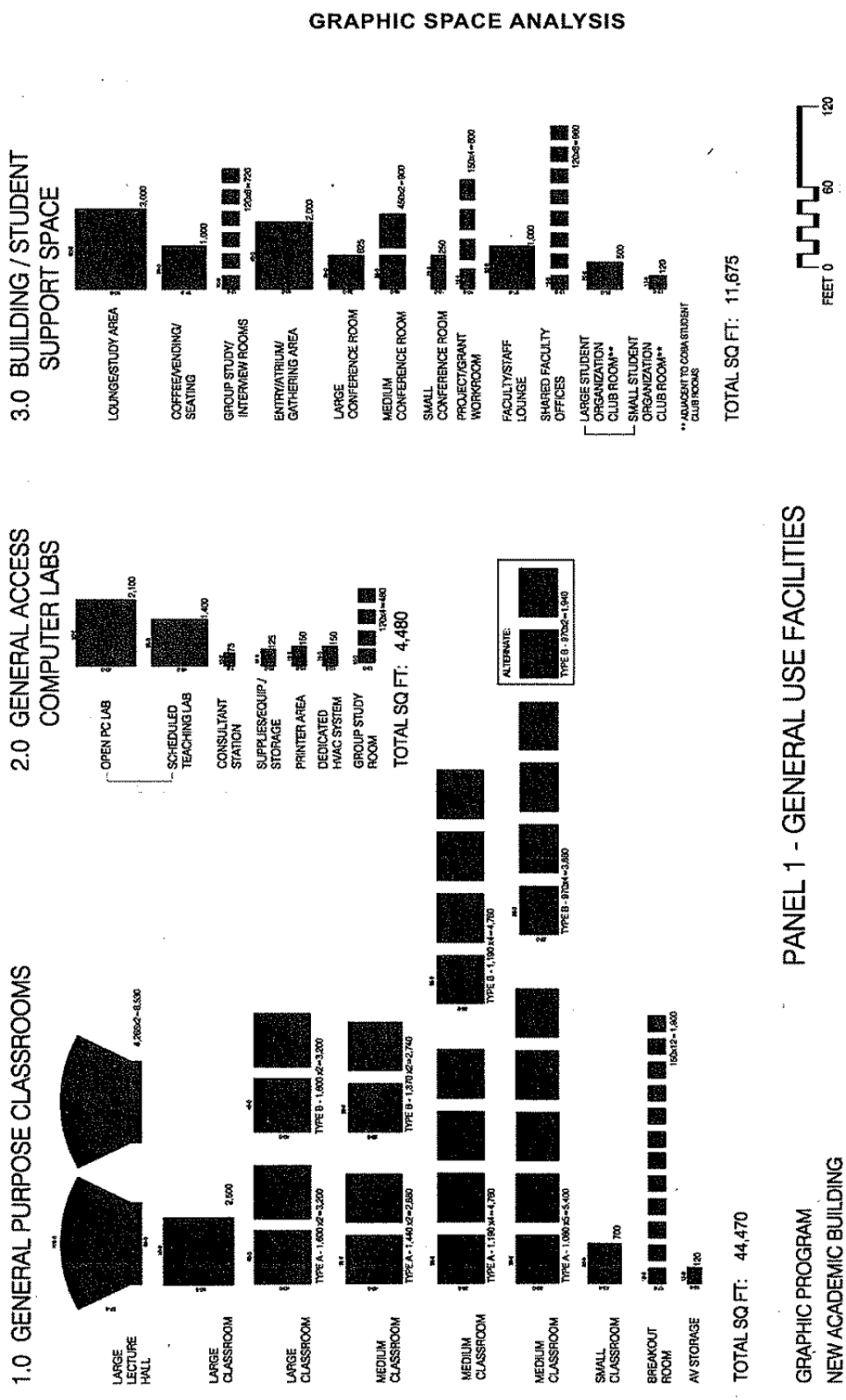
#20b Example: ADJACENCY MATRIX

Option 2:
This tool is the basis for the floor plan configuration, which is designed by the Architect.

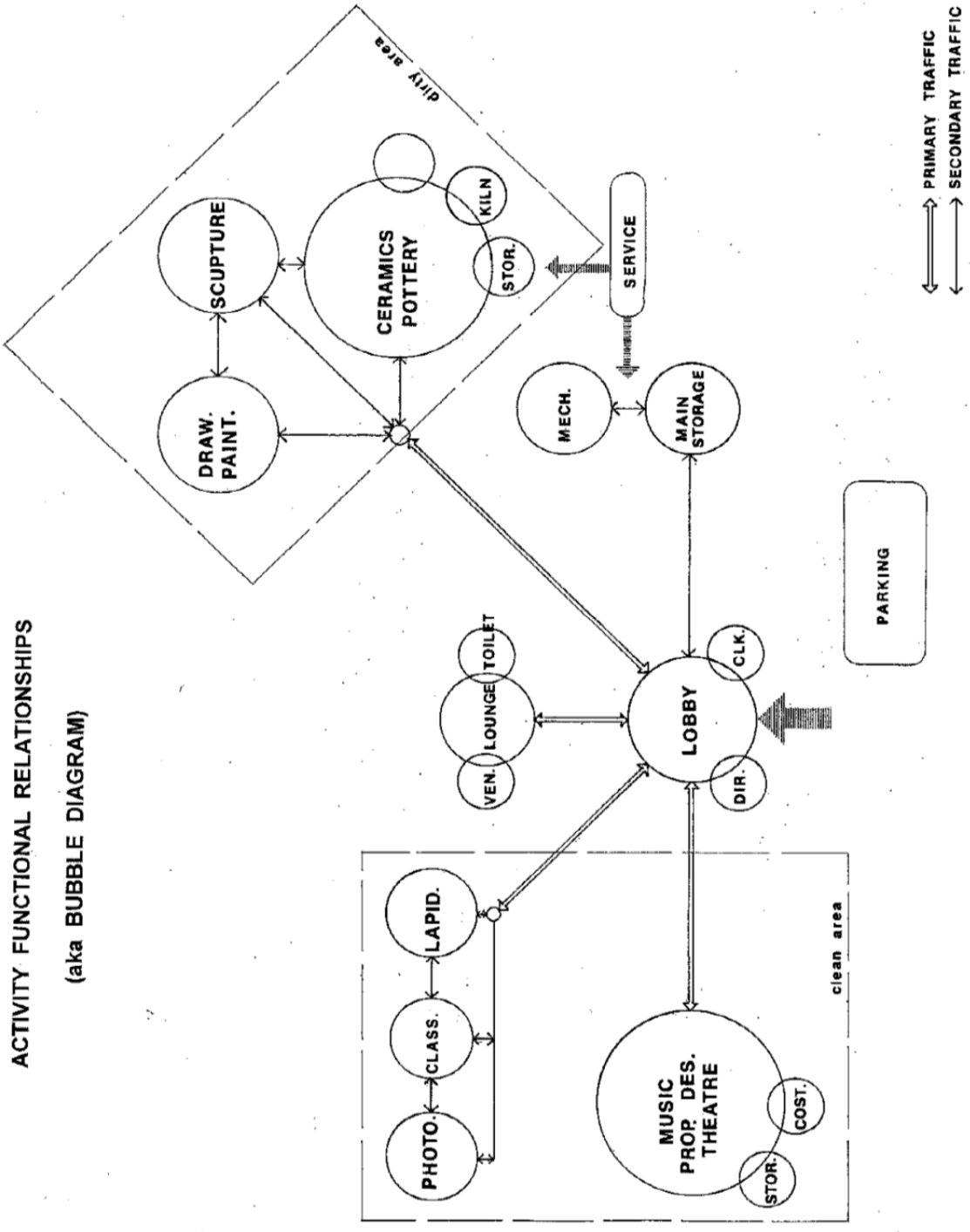
		Room name		Room name	Room name	Room Name	Room Name	Room Name	Room Name	Room Name	Room Name	Room Name	Room Name	Room Name	Room Name	Room Name
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Room name															
2	Room name															
3	Room name															
4	Room name															
5	Room name															
6	Room name															
7	Room name															
8	Room name															
9	Room name															
10	Room name	x						x								
11	Room name	x														
12	Room name	x			x			x								
13	Room name										x					
14	Room name															
15	Room name							x								

KEY		
Mandatory Adjacency		Adjacency is critical to maximize productivity or effective use of space
Desirable Adjacency		Adjacency would be helpful but not necessary
Not Desirable	x	Any adjacency would harm productivity or effective use of space

#21 Example: GRAPHIC SPACE ANALYSIS



#22 Example: BUBBLE DIAGRAM
(aka Activity Functional Relationships)
(aka Spatial Dimension of Activities/Rooms)



#23 Exhibit: OFFICE NEEDS QUESTIONNAIRE

(Note: this needs analysis questionnaire/interview questions can be customized to suit many types of instructional spaces)

DATE: _____

DEPARTMENT: _____

OFFICE: _____

MAIN CONTACT:

NAME:	TITLE:	PHONE #:	E-MAIL:
_____	_____	_____	_____

OTHER PERSONS INVOLVED WITH COMPLETING THIS FORM:

NAME:	TITLE:	PHONE #:	E-MAIL:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

NOTE: Please be as specific as you can in your responses. Complete answers to each question provide us with the information needed to accurately assess your laboratory's space planning needs. Attach additional information as necessary. If you have questions regarding this questionnaire, please feel free to e-mail. Thanks!

Please e-mail or mail the completed questionnaire to A/E no later then ____

CURRENT FACILITIES

1. Identify your present principal departmental and office location (area of building, floor).

2. Identify and describe the location of any assigned office space located in areas other than the principal location (e.g. near storage rooms, prep rooms, etc.).

3. Identify any elements of your office currently located in areas other than your principal location (noted above) that should be consolidated within the principal location and describe why.

4. Identify any equipment or space belonging to other offices or departments that you routinely use.

FUNCTIONS & EQUIPMENT

5. How do you envision your department and offices changing in the next 5 - 10 years and what new or altered activities will be performed here? Please briefly note the reason(s) for this change (e.g. new technology, new equipment, new educational or training programs, new management concepts, etc.). How will these changes impact the size of your area (percent increase/decrease)?

6. Are there any critical factors (e.g. program, technology, funding, staffing) that will either help or hinder your department and office in achieving its plans for the next 5 - 10 years? How will these factors affect the size of your space (percent increase/decrease)?

7. Please provide a list of the current major equipment in your offce. Include any special requirements (electrical, plumbing, gas hookups, etc.) Include computer equipment, laboratory equipment. DO not include small movable equipment less than 2x2 ft., such as coffee pots, pencil sharpeners, calculators, test tube racks, etc.). You can provide this list as a separate attachment if it is easier.

8. What major new equipment do you see your office adding, replacing, or eliminating in the next 5 - 10 years?

OCCUPANCY

9. Please list the average and maximum number of people you anticipate in your office at any one time.

PHYSICAL RELATIONSHIPS

10. Identify offices, other non-office areas, and other areas that should be located in close proximity to your office to enhance key working relationships. Please prioritize the need for close physical proximity. Also, note if there are any areas/offices that should not be in close proximity.

11. Can your office be located or shared with other departments to improve space efficiency and overall operational effectiveness? If so, please identify and explain potential benefits.

12. List current office space and system deficiencies (size, support space, electrical, air handling, plumbing, etc.).

13. Describe any special system requirements needed for your office to function (e.g. medical gases, special lighting, ventilation requirements, temperature control, power, structural support for heavy equipment, ceiling heights, AV equipment, etc.).

14. What are your concerns regarding the facility renovation (issues that should be addressed?)

Thank you very much for your time and effort!

#24 Exhibit: CLASSROOM NEEDS QUESTIONNAIRE

(Note: this needs analysis questionnaire/interview questions can be customized to suit many types of instructional spaces)

DATE: _____

DEPARTMENT: _____

CLASSROOM: _____

MAIN CONTACT:

NAME:	TITLE:	PHONE #:	E-MAIL:
_____	_____	_____	_____

OTHER PERSONS INVOLVED WITH COMPLETING THIS FORM:

NAME:	TITLE:	PHONE #:	E-MAIL:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

NOTE: Please be as specific as you can in your responses. Complete answers to each question provide us with the information needed to accurately assess your laboratory's space planning needs. Attach additional information as necessary. If you have questions regarding this questionnaire, please feel free to e-mail. Thanks!

Please e-mail or mail the completed questionnaire to A/E no later then ____

CURRENT FACILITIES

1. Identify your present principal departmental and classroom location (area of building, floor).

2. Identify and describe the location of any assigned classroom or laboratory space located in areas other than the principal location (e.g. storage rooms, prep rooms, etc.).

3. Identify any elements of your classroom currently located in areas other than your principal location (noted above) that should be consolidated within the principal location and describe why.

4. Identify the nature and location of any areas within your classroom that you share with other departments.

5. Identify any equipment or space belonging to other classrooms, laboratories or departments that you routinely uses.

FUNCTIONS & EQUIPMENT

6. What is the primary function of your classroom area? Other functions?

7. How do you envision your department and classroom changing in the next 5 - 10 years and what new or altered activities will be performed here? Please briefly note the reason(s) for this change (e.g. new technology, new equipment, new educational or training programs, new management concepts, etc.). How will these changes impact the size of your area (percent increase/decrease)?

8. Are there any critical factors (e.g. program, technology, funding, staffing) that will either help or hinder your department and classroom in achieving its plans for the next 5 - 10 years? How will these factors affect the size of your space (percent increase/decrease)?

9. Please provide a list of the current major equipment in your classroom. Include any special requirements (electrical, plumbing, gas hookups, etc.) Include computer equipment, laboratory equipment, refrigerators, freezers; do not include small movable equipment less than 2x2 ft., such as coffee pots, pencil sharpeners, calculators, test tube racks, etc.). You can provide this list as a separate attachment if it is easier.

10. What major new equipment do you see your classroom adding, replacing, or eliminating in the next 5 - 10 years?

OCCUPANCY

11. Please list the average and maximum number of people you anticipate in your classroom at any one time.

12. If you anticipate a change in these numbers during the next 5 - 10 year period, please indicate your best estimate of the new average and maximum and identify the reason for the anticipated change.

PHYSICAL RELATIONSHIPS

13. Identify offices, other non-classroom areas, and other laboratory areas that should be located in close proximity to your classroom to enhance key working relationships. Please prioritize the need for close physical proximity. Also, note if there are any areas/labs that should not be in close proximity.

14. Within your classroom, identify the functions and/or rooms that require close physical proximity. Consider desired workflow and how you would reconfigure your space to make it more efficient.

15. Are there elements of your classroom that could be located or shared with other departments to improve space efficiency and overall operational effectiveness? If so, please identify and explain potential benefits.

16. List current classroom space and system deficiencies (size, support space, electrical, air handling, plumbing, etc.) including those identified by outside inspecting agencies.

17. Describe any special system requirements needed for your classroom to function (e.g. medical gases, special lighting, ventilation requirements, temperature control, power, structural support for heavy equipment, ceiling heights, AV equipment, etc.).

18. What are your concerns regarding the facility renovation (issues that should be addressed?)

Thank you very much for your time and effort!

#25 Exhibit: LABORATORY NEEDS QUESTIONAIRE

(Note: this needs analysis questionnaire/interview questions can be customized to suit many types of laboratories and technology intensive rooms)

DATE: _____

DEPARTMENT: _____

LABORATORY: _____

MAIN CONTACT:

NAME:	TITLE:	PHONE #:	E-MAIL:
_____	_____	_____	_____

OTHER PERSONS INVOLVED WITH COMPLETING THIS FORM:

NAME:	TITLE:	PHONE #:	E-MAIL:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

NOTE: Please be as specific as you can in your responses. Questions, which are answered completely, provide us with the information needed to accurately assess your laboratory's space planning needs. Attach additional information as necessary. If you have questions regarding this questionnaire, please feel free to e-mail ____. This questionnaire leads to the development of Room Data Sheets, which are forms that identify specific and unique requirements for each individual laboratory and each support space.

Please e-mail or mail the completed questionnaire to the A/E no later then ____.

Contents:

OVERALL GOALS AND EXPECTATIONS FOR NEW OR REMODELED LABORATORY FACILITIES

1. What are your overall goals and expectations for new or remodeled lab facilities (i.e., issues that should be addressed?)

CURRENT DEPARTMENTAL AND CURRENT LABORATORY FACILITIES

1. Identify your present principal departmental and laboratory location (area of building, floor).

2. What is the primary function of your laboratory area? Other functions?

3. Who now occupies and use the facilities: (students, professors, principal investigators, outside professionals, etc.) How does the user work within the space?

4. Identify and describe the location of any assigned laboratory space located in areas other than the principal location (e.g. storage rooms, equipment rooms, etc.).

5. Identify any elements of your laboratory currently located in areas other than your principal location (noted above) that should be consolidated within the principal location and describe why.

6. Identify the nature and location of any areas within your laboratory that you share with other laboratories or departments.

7. Identify any equipment or space belonging to other laboratories or departments that your lab routinely uses.

8. Describe any special system requirements needed for your laboratory to function (e.g. medical gases, special lighting, ventilation requirements, temperature control, power, structural support for heavy equipment, ceiling heights, etc.).

9. Please provide a list of the current major equipment in your laboratory. Include any special requirements (electrical, plumbing, gas hookups, etc.) Include computer equipment, laboratory equipment, refrigerators, freezers. Do not include small movable equipment less than 2x2 ft., such as coffee pots, pencil sharpeners, calculators, test tube racks, etc.). You can provide this list as a separate attachment if it is easier.

CURRENT LABORATORY DEFICIENCIES

1. What works well in your lab?

2. List current laboratory space and system deficiencies or things that need improvement (size, support space, electrical, air handling, plumbing, etc.) including those identified by outside inspecting agencies.

FUTURE LABORATORY OCCUPANTS

1. Please list the average and maximum number of people you anticipate working in your department and/ or laboratory at any one time. (students, professors, principal investigators, outside professionals, etc.)

2. If you anticipate a change in these numbers during the next 5 - 10 year period, please indicate your best estimate of the new average and maximum and identify the reason for the anticipated change.

PROPOSED DEPARTMENT AND LABORATORY FUNCTIONS/PROCESSES

1. Describe how you want the space to function as a whole?

2. How do you envision your department and laboratory changing in the next 5 - 10 years and what new or altered activities will be performed here? Please briefly note the reason(s) for this change (e.g. new technology, new equipment, new educational or training programs, new management concepts, etc.). How will these changes impact the size of your area (percent increase/decrease)?

3. Are there any critical factors (e.g. program, technology, funding, staffing) that will either help or hinder your department and laboratory in achieving its plans for the next 5 - 10 years? How will these factors affect the size of your laboratory (percent increase/decrease)?

4. What major new equipment do you see your laboratory adding, replacing, or eliminating in the next 5 - 10 years?

5. What are the operations and maintenance requirements?

6. Is there any special lab classification?

7. Any additional requirements?

PROPOSED PHYSICAL ADJACENCY RELATIONSHIPS

1. Identify offices, other non-laboratory areas, and other laboratory areas that should be located in close proximity to your laboratory to enhance key working relationships. Please prioritize the need for close physical proximity. Also, note if there are any areas/labs that should not be in close proximity.

2. Within your laboratory, how is your lab going to be divided up? Identify the functions and/or rooms that require close physical proximity. Consider desired workflow and how you would reconfigure your department to make it more efficient. Show each lab is connected. If so, how and where?

3. Are there elements of your laboratory that could be located or shared with other departments to improve space efficiency and overall operational effectiveness? If so, please identify and explain potential benefits.

Thank you very much for your time and effort!

#26 Example: BASIC COMPILATION OF USER NEEDS

This form can be used to capture the basic or fundamental needs of specific user groups and is intended to present a summarize list which can be quickly grasped by the reader. It can also be used as a precursor to the detailed Room Data Sheets, found on the next pages.

USER GROUP	ACTIVITY CHARACTERISTICS	AUDIO REQMTS	VISUAL REQMTS	TECHNOLOGY REQMTS
Individuals				
Impromptu Groups				
Planned Groups				
Faculty Seminar Group				
Staff Help Group				
Café Users				
Other				

#27 Example: ROOM DATA SHEET - OFFICE

PROJECT NAME		**RDS–OFFICE**	
DSF PROJECT NO.		**DATE:**	
ROOM NAME		**ROOM NUMBER**	
ROOM TYPE		ROOM SIZE (ASF)	
ROOM USERS		ROOM DIMENSIONS	
ADJACENCIES		HOURS USED	
FUNCTION			
ARCHITECTURAL			
FLOORS & BASE MTL			
WALLS & STC			
CEILING MAT'L & HT			
DOOR SIZE & MAT'L		DOOR VISION PANEL	
DOOR HARDWARE			
NATURAL LIGHT		DAYLIGHT CONTROL	
FIXED CASEWORK			
SPECIAL			
PLUMBING			
SINKS			
GASES / OTHER			
HVAC			
HEATING			
COOLING			
VENTILATION			
ELECTRICAL			
POWER			
LIGHTING		LTG MOTION SENSOR	
SPECIAL			
FIRE ALARM/DET.			
COMMUNICATIONS			
VOICE (TELEPHONE)		AUDIO	
DATA (COMPUTER)		SOUND SYSTEM	
VIDEO		PA SYSTEM	
CABLE TV		INTERCOM	
CAMPUS CLOSE TV		CLOCK	
SECURITY			
DOOR CONTROL		KEYPD/PROX CD/REX	
INTRUSION DETECTION			
VIDEO SURVEILLANCE		INTEGRATION REQ'T	
AUDIO/VISUAL			
SCREENS		VIDEO PROJECTOR	
OTHER			
ACOUSTICS			
DESCRIPTION		NC RATING	
MOVABLE EQMT			
TYPE & SIZE		CONNECTIONS REQ'D	

REMARKS	

Note: See DSF Website, Policy and Procedure Manual for Architects/Engineers, and Consultants, for Room Data Sheets for Offices, Classrooms and Laboratories. Customize these to suit the needs of your project.

#28 Example: ROOM DATA SHEET - CLASSROOM

ROOM NAME		**ROOM NUMBER**	
CLSSROOM TYPE		CLSSRM SIZE (ASF)	
CLSSROOM USERS & NO.		CLSSRM DIMENSIONS	
ADJACENCIES		HOURS USED	
FUNCTION			
ARCHITECTURAL			
FLOORS & BASE MTL			
WALLS & STC			
CEILING MAT'L & HT			
DOOR SIZE & MAT'L		DOOR VISION PANEL	
DOOR HARDWARE			
NATURAL LIGHT		DAYLIGHT CONTROL	
FIXED CASEWORK			
INSTR. CONSOLE			
A/V STORAGE			
STUDENT TABLES		DIMEM BETWN TABLE	
SEATING, TYPE & NO.			
CHALKBD OR WHITEBD			
TACKBOARDS			
FIRE SUPPRESSION			
SUPPRESSION SYS			
FIRE EXTINGUISHER			
PLUMBING			
SINKS			
PIPED SERVICES			
HVAC			
HEATING	68-70 degrees minimum, in winter		
COOLING	78 degrees maximum, in summer		
VENTILATION			
SPECIAL			
ACCOUSTICAL CONTROL	Design HVAC to not exceed NC 35 noise level		
ELECTRICAL			
POWER			
FLOOR POWER			
FLR VOICE,DATA,VID,MIC			
WALL			
WALL VCE,DATA,VID,MIC			
INSTRUCT CONSOLE			
LIGHTING	Non-glare (30-40 fc) w/electronic ballasts, T-8 lamps, dimmable to 5%		
HOUSE,GENERAL			
HOUSE, FRONT			
STAGE, INSTRUCTOR			
CTRTOP OF INST CONS.			
INSTRUCT CONSOLE			
INSTRUCT ALT POS			
CHALKBD, WHITEBD			
LIGHTING CONTROLS			

DIMMING			
SCENES NEEDED			
FIRE ALARM / DETCT.			
COMMUNICATIONS			
VOICE (TELEPHONE)			
DATA (COMPUTER)			
VIDEO			
CABLE TV			
CAMPUS CLOSE CIR.TV			
SOUND SYSTEM		PORTABLE (Y/N)	
PA SYSTEM		PORTABLE (Y/N)	
INTERCOM			
ASSISTED LISTENING			
CLOCK			
AUDIO/VISUAL			
SPEAKER SYS – VOICE			
SPEAKER SYS – PROG			
INTEGRATED SOUND SYS			
ASST LISTENING SYS			
VIDEO/DATA PROJECTOR		LUMENS	
MAC/PC AT INSTR CON			
A/V TOUCH CONT PANEL			
LIGHT DIMMING PANEL			
A/V EQUIPMENT			
AUDIO CASSETTE			
CD PLAYER			
DOC CAMERA			
DVD PLAYER		LASER DISC PLAYER	
SLIDE PROJECTORS			
OVERHD PROJECTOR			
PROJECTION SCREEN			
TYPE/SIZE/NO.			
SCREEN CONTROLS			
PROJECTION BOOTH			
CONTROLS (IF REQ'D)			
EQUIPMENT RACK			
AUDIO I/O JACKS			
INTERCOM: OPER-INSTR			
A/V & LIGHT CONTROL			
SECURITY			
DOOR CONTROL		KEYPD/PROX.CD/REX	
INTRUSION DETECTION			
VIDEO SURVEILLANCE			
INTEGRATION REQ'T			
ACOUSTICS			
DESCRIPTION			
NC RATING			
MOVABLE EQPT			
TYPE & SIZE			
REMARKS			

#29 Example: ROOM DATA SHEET – LABORATORIES

ROOM NAME		**ROOM NUMBER**	
LAB TYPE		LAB SIZE (ASF)	
LAB USERS & NO.		LAB/MODULE DIM.	
LAB SPACE/PERSON		HOURS USED	
% OF BENCH TO FLR			
ADJACENCIES			
FUNCTION OF LAB			
OFFICE LOC. (NEAR LAB?)			
CHEMICALS USED			
ARCHITECTURAL			
FLOOR MTL & BASE			
WALLS & STC			
CEILING TYPE & HT			
DOOR SIZE & TYPE		DOOR VISION PANEL	
SWING IN/OUT OF LAB?			
RECESSED?			
HARDWARE			
EMERGENCY EXITING			
NATURAL LIGHT			
WINDOW SIZE			
DAYLIGHT CONTROL			
LIGHT SENSITIVE EQ.			
CHALKBD OR WHITEBD			
TACKBOARDS			
STUDENT SEAT NO.			
CASEWORK			
CONVENTIONAL			
NEW OR EXISTING			
SUSPENDED			
NEW OR EXISTING			
MULTI-COMPONENT			
MATERIAL			
WOOD			
METAL			
PLAS LAMINATE			
VAC FORMED PLAS			
COUNTER			
MT'L & THICKNESS			
COLOR			
WALL STORAGE			
CABINETS			
SLIDE DOOR			
SWING DOORS			
SHELVING			
ON WALLS			
ON CENTER BENCH			
TALL STORAGE			
STRUCTURAL			
SPEC FLOOR SYSTEMS			
COLUMN/BAY SPACE			

VIBRATION CONTROL						
CONVEYANCE SYS.						
HOODS						
TYPE 1-NO. & SIZE					FACE VELOCITIES	
CONTROL SYSTEM					PIPING & GASES	
SINK (TYPE & SIZE)					VAC. BREAKER LOC	
TYPE 2-NO. & SIZE					FACE VELOCITIES	
CONTROL SYSTEM					PIPING & GASES	
SINK (TYPE & SIZE)					VAC. BREAKER LOC	
ADD'L EXH PRT/CAN						
BIOSAFETY FOR LAB						
BIOSAFETY CABINET					DUCTED?	
CLASS						
CHEMICAL STORAGE					ADJACENCY	
IN-LAB						
CENTRAL						
MULTI-LOCATIONS						
DUCTED STORAGE CAB.						
LAB WASTE (LIQUID)					MONITORING	
CHEMICAL DISPOSAL						
HANDLING PROC.						
ISOTOPES HANDLING						
IN ANY LAB?						
IN SPECIAL LABS?						
IN DESIGNATED AREA?						
FLAM. STORAGE CAB.						
EMERGENCY SHOWER					EMER. EYEWASH	
ATTACHED CLEAN ROOM					CLASS	
FIRE SUPPRESSION						
SUPPRESSION TYPE						
FIRE EXTINGUISHERS						
PLUMBING						
SINKS						
LOC/TYPE/SIZE/MAT'L					LOC/TYPE/SIZE/MAT'L	
CUPSINKS PER BRANCH						
PIPED SERVICES						
HW/CW						
IHW/ICW						
STEAM						
AIR & PRES. REQ'D					QUALITY OF AIR	
NATURAL GAS						
VACUUM					CENT OR LOC PUMPS	
OXYGEN					CENT OR LOC PUMPS	
NITROGEN					CENT OR PORT. TANK	
ARGON					CENT OR PORT. TANK	
DISTILLED WATER	RECIRCUL		RESISTIVITY		CENT OR LOC SYS	
DEIONIZED WATER	RECIRCUL		RESISTIVITY		CENT OR LOC SYS	
RO WATER	RECIRCUL		RESISTIVITY		CENT OR LOC SYS	
SPECIAL GASES						
NOT IN PIPE						
PIPED FR CEN LOC						
PIPED FR CLOSET						

PIPED FR EXT OR STOR			
WASTE PIPING SYS			
DRAINS			
HVAC			
HEATING	68-70 degrees min, in winter	SPEC ASHRAE/OSHA	
COOLING	78 degrees max, in summer	SPEC ASHRAE/OSHA	
VENTILATION		AIR CHANGES/HR	
HUMIDITY CONTROL			
REQUIREMENTS			
TYPE OF HUMIDIFIERS			
ROOM AIR PRES			
POS OR NEG TO CORR			
ACOUSTICAL CONTROL	Design HVAC to not exceed NC 40 noise level		
CONTROL SYSTEM			
AIR FILTRATION TYPE			
ELECTRICAL			
POWER			
WATT/SF IN LABS			
PANEL SIZE			
LAB S.F./PANEL			
RECEP. SPACING			
NO. OF RECEP/CIRCUIT			
GROUNDING REQ.			
EMERGENCY POWER		BACK-UP PWR EQUIP	
UPS			
SPEC COMP. WIRING			
ANY 3 PH REQUIRED?			
SPECIAL OUTLETS			
LIGHTING			
PARALLEL TO BENCH			
PERPEND. TO BENCH			
TYPE & FC AT BENCH			
AT INSTRUCT BENCH			
AT CHALKBOARD, FC			
AT PROJECTION SCRN			
LIGHTING CONTROLS			
BLACK, ULTRAVIOLET			
DIMMING			
OCCUPANCY SENSOR			
FIRE ALARMS /DET.			
COMMUNICATIONS			
VOICE (TELEPHONE)			
DATA			
VIDEO			
CABLE TV			
CAMPUS CLOSED TV			
PA SYSTEM			
INTERCOM			
CLOCK		CENT CAMPUS GPS SYS	
AUDIO/VISUAL			
AUDIO SYS			
SPEAKERS			

NETWORK SERVICES			
VIDEO/DATA PROJECTN			
PROJECTION SCREEN			
TYPE/SIZE/NO.		SCREEN CONTROLS	
SECURITY			
DOOR CONTROL		KEYPD/PROX CD/REX	
INTRUSION DETECT			
VIDEO SURVEILLANCE			
INTEGRATION REQ'T			
ACOUSTICS			
DESCRIPTION			
NC RATING			
ENVIRONMENTL RM			
TEMP RANGE			
VENTILATED AIR			
ON EMER POWER			
CENTRAL MONITORING OF EQUIPMENT			
FREEZER			
INCUBATOR			
OTHER			
SPECIAL LAB EQUIPMENT (Type, Size, Mech/Elec Hook-up, Back-up Pwr, Vibration Control)			
INSTRUCTOR STATION			
AUTOCLAVE			
CENTRIFUGE			
PLT GROWTH CHAMB			
ELEC. MICROSCOPE			
STERILIZERS			
FREEZERS			
REFRIGERATORS			
WATER POLISHING			
SIGNAGE			
NEW OR EXISTING			
MOVABLE EQUIP			
EXIST/RE-USED (LIST)			
NEW (LIST)			
OPERATIONS & MAINTENANCE REQUIREMENTS			
OWNER'S NEEDS & EXPECTATIONS			
QUALITY REQ. FOR MATIALS & CONSTR.			
TRAINING FOR OWNER'S PERSONNEL			
FUNCTIONAL TESTING OF MEP COMP			
ENERGY EFFICIENCY GOALS			
ENVIRONMENTAL / SUSTAINABILITY GOALS			
SPECIAL HEALTH & HYGIENE REQUIREMENTS			

REMARKS

#30 Example: EQUIPMENT SCHEDULE

EQUIPMENT SCHEDULE

Project Name _____ Room Number _____ Date Last Revised _____ A/E Proj. No. _____ DSF Proj. No. _____

Department/Group Name _____ Room Name _____ Contact, Phone _____

EQUIPMENT				PHYSICAL				ELECTRICAL			PIPED SERVICES			MECHANICAL			REMARKS
					Size							Service			Exhaust		
Existing (room no.)	Future (date)	Qty	Name (make / model)	Supply / Install *	Location **	Width (in)	Depth (in)	Height (in)	Volts	Amps	Phase	Top	Type	Volume (units)	Heat Reject.	Type	Volume (cfm)	

* Supply / Install Assignment

OFOI Owner Furnished / Owner Installed
CFCI Contractor Furnished / Contractor Installed
OFCI Owner Furnished / Contractor Installed
CFOI Contractor Furnished / Owner Installed

** Location

F Floor Mounted
W Worksurface Mounted
P Partition Mounted
C Ceiling Mounted

#31 Example: REGULATORY REQUIREMENTS AND GUIDELINES

In addition to State/DOA/DSF requirements, guidelines, and standards, the below entities may directly affect or have some jurisdiction over the project design and construction.

STATE GOVERMENT AGENCIES
1. Department of Commerce
2. Wisconsin Historical Society

INSTITUTION
1. Design Guidelines
2. Physical Environment Committee Review

LOCAL GOVERNMENTAL AUTHORITIES

1. Local Zoning Office
2. Local Fire Department
3. Local Historic Preservation Commission

BUILDING CODES

1. International Building Code, 2006
   (WI Commercial Building Code, Chapter 62)

2. Handicapped Accessibility Americans with Disabilities Act, July 1, 1994
   (WI Commercial Building Code, Chapter 62)

3. Life Safety Code NFPA-1, Life Safety Code, 2006
   (WI Commercial Building Code, Chapter 30)

4. Fire Code NFPA-1, Life Safety Code, 2006

5. Elevator Code WI Commercial Building Code, Chapter 18

6. ACGIH Industrial Ventilation – A manual of recommended practice

7. ANSI/AIHA 29.5 ::Laboratory Ventilation Standard

8. NFPA 45 – Fire Projection for Laboratories Using Chemicals

9. NFPA 30 – Flammable and Combustibles Liquids Code

10. OSHA 29 CFR Part 1910 – Occupational Exposures to Hazardous Chemicals in Laboratories

11. ASHRAE Standard 110-1995 – Method of Testing Performance of Laboratory Fume Hoods

12. Energy Conservation International Energy Conservation Code, 2006
    (WI Commercial Building Code, Chapter 63)

13. National Electric Code, 2005
    (WI Commercial Building Code, Chapter 63)

14. International Mechanical Code, 2006
    (WI Commercial Building Code, Chapter 64)

15. Plumbing Code WI Commercial Building Code, Chapters 81-84)

16. Fuel and Gas International Fuel Gas Code, 2006
    (WI Commercial Building Code, Chapter 65)

#32 Exhibit: TYPICAL BUILDING EFFICIENCIES and AVERAGE GSF BUILDING COSTS

Ref: "DSF Capital Budget Estimating Guidelines" (check for most recent version)

SPACE CATEGORY	Bldg. Size (Total GSF)	Efficiency (%)	$/GSF (ENR 4557 - Nov 2006)
Classroom/Lecture Building	50,000	66	131 -184 *
Fine Arts/Auditorium - (Includes $10.00 Fixed Equip.)	50,000	62	210 - 263 *
Food Service Building - (Includes $20.00 Food Service Equip)	30,000	65	163 - 174 *
Laboratory Space:			
- Academic Dry Lab (Includes $10.00 Lab Equipment)	25,000	62	189 – 236 *
- Academic Wet Lab (Includes $18.00 Lab Equipment)	25,000	60	236 – 420 *
- Research Lab (Includes $18.00 Lab Equipment)	30,000	58	268 – 420 *
- Computer Lab	30,000	62	158 - 184 *
Library	75,000	75	121 – 152
Office Buildings:			
- 1 Story	10,000	72	121 -131 *
- 2/4 Story	40,000	70	121 -158 *
Physical Education Buildings:			
- Arena	80,000	78	95 - 105
- Gym/Track	115,000	74	107 -126
Service and Maintenance Buildings:			
- Vehicle Maintenance	4,000	83	74 - 84
- General Service	25,000	85	76 - 84
Storage Buildings:			
- Pole Frame (w/concrete flr, electric)	2,400	95	42 - 53

- Metal Frame (w/14'wall ht., electric)	5,000	90	53 - 58
- Heated Warehouse	15,000	86	63 - 74
Student Center (Includes $6.00 Special Equipment)	75,000	65	168 - 194 *
Visitor Center/Exhibit	10,000	80	126 -147 *
Parking Ramp (500 cars)	165,000	60	37 - 42

* Indicates includes air conditioning

#33 Example: BUDGET SUMMARY

This Budget Summary is typically shown in the executive summary of the Program Statement. This format will also be used in future Agency Requests.

Ref: "DSF Policy and Procedure Manual for Architects/Engineers and Consultants" and "DSF Capital Budget Cost Estimating Guidelines"

BUDGET SUMMARY:

TOTAL PROJECT COST

	(delete column if not applicable) Per Agency Request for A/E Services	Per Program Statement
Construction		
Contingency *(7% min)*		
A/E Design and Other Fees		
DSF Management (4%)		
Hazardous Materials Abatement		
Movable Equipment		
TOTAL PROJECT COST		

Assignable Square Feet	ASF	ASF
Efficiency Ratio	%	%
Gross Square Feet	GSF	GSF
Construction Cost/GSF	$/GSF	$GSF
Total Project Cost/GSF	$/GSF	$GSF

TOTAL COST OF OCCUPANCY*1 *2

ITEM	$/GSF	GSF	ANNUAL COST
Debt Service			
Municipal Services			
Energy/Utilities			
Maintenance & Repairs			
Building & Grounds			
Other			
TOTAL COST OF OCCUPANCY			

*1 Ref: Wisconsin Statute 16.891: Total Cost of Occupancy means the cost to operate and maintain the physical plant of a building or structure, or facility, including administrative costs of any agency attributed to operation and maintenance of a building, structure, or facility, together with any debt service costs associated with the building, structure, or facility. For corrections projects, see s. 13.48(5)(b).

*2 If applicable, Lease costs may include and/or be a substitute for all of the above.

An additional chart can include sustainability performance measures.

#34 Example: SCHEDULE SUMMARY

This Schedule Summary is typically shown in the executive summary of the Program Statement. This format will also be used in future Agency Requests. The below example is a minimum. If the project includes phasing, then those dates should also be listed.

Ref: "DSF Capital Budget Cost Estimating Guidelines" for Schedule Information (See DSF Website)

SCHEDULE SUMMARY:

	Per Agency Request for A/E Services *(delete column if not applicable)*	Per Program Statement (or Program Statement Verification)
Enumeration *(if applicable)*		
A/E Selection		
Design Report - Authority to Construct		
Bid Opening		
Construction Start		
Substantial Completion		
Occupancy/Move In		
Final Completion and Closeout		