

Professional Development  
Programs in Project Management  
for Design & Construction

*The University of Wisconsin*

# **Effective Project Management for Building Design and Construction**

A Program Overview  
and Synopsis

**February 11, 1991  
General Services Administration  
San Antonio, Texas**



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GSA Regional  
Seminars on "Effective  
Project Management"**

Handout list for GSA PBS debriefing session  
February 11, 1991 - San Antonio, Texas

• **Debriefing discussion outline and introduction** - 10 pages

• **Discussion material** - 28 pages

- 01 Considerations around which debriefing is built
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- 28 Recommendations

• **Appendix A - Description of GSA PBS pm matrix** - 4 pages

GSA PBS Project Manager Seminar Debriefing - discussion outline

**I. Introduction - considerations around which this discussion session is built - San Antonio, Texas - February 11, 1991**

- A. The mission of GSA PBS**
- B. The macro boundaries of the GSA PBS mission**
- C. The organizational location of the project manager's work**
- D. What the student was supposed to learn in the seminars**
- E. What we did in the regional seminars**
- F. What our work with the regions showed us**
- G. How the GSA PBS project manager adds value to the project**
- H. Project relations of GSA PBS with external agencies with whom they must interact**
  - I. How GSA PBS can optimize the use of the project manager training?**
- J. Recommendations**

**II. The mission of GSA PBS - as assumed for a baseline discussion**

To successfully accomplish major facility acquisition, upgrading and management as required to meet the needs of client government agencies.

**III. The macro boundaries of the GSA PBS mission**

The matrix components below appear to contain most of the major individual action courts (one unit of volume) in which the work of the GSA PBS must be played.

**A. GSA PBS macro matrix components**

- 1. X axis - Line of action
  - X1 Determine need - Community plan and building evaluation
  - X2 Prepare program of requirements - Prospectus development study
  - X3 Validate and approve scope & cost - Approval & funding
  - X4 Acquire site - Pre design activity
  - X5 Design project - Obtain client/tenant & regulatory input & prepare final construction documents
  - X6 Execute pre construction activities - Swing space occupancy, relocation, construction contracts, phasing, mobilization
  - X7 Develop site - Base construction
  - X8 Build out for tenants - Tenant requirements, partitions, interiors & secondary distribution systems
- 2. Y axis - Functional operating divisions
  - Y1 Planning
  - Y2 Management support staff
  - Y3 Contracts division
  - Y4 Real property management and safety
  - Y5 Real estate

GSA PBS Project Manager Seminar Debriefing - discussion outline

- Y6 Design & construction
- 3. Z axis - Functional operations - items of project work (see Appendix A for details)
  - Z1 Planning
  - Z2 Real estate
  - Z3 Architecture
  - Z4 Engineering
  - Z5 Contracts
  - Z6 Construction
  - Z7 Property management
  - Z8 Support services
  - Z9 Executive staff operations

**IV. The organizational location of the project manager's work**

**A. Project manager macro matrix components**

1. X axis - Line of action
  - X4 Acquire site - Pre design activity
  - X5 Design project - Obtain client/tenant & regulatory input & prepare final construction documents
  - X6 Execute pre construction activities - Swing space occupancy, relocation, construction contracts, phasing, mobilization
  - X7 Develop site - Base construction
  - X8 Build out for tenants - Tenant requirements, partitions, interiors & secondary distribution systems
2. Y axis - Functional operating divisions
  - Y1 Planning
  - Y2 Management support staff
  - Y3 Contracts division
  - Y4 Real property management and safety
  - Y5 Real estate
  - Y6 Design & construction
3. Z axis - Functional operations - items of project work
  - Z1 Planning
  - Z2 Real estate
  - Z3 Architecture
  - Z4 Engineering
  - Z5 Contracts
  - Z6 Construction
  - Z8 Support services - minor administrative actions only

**B. Items that define a pm's work within the small courts of action**

1. Operating division within which the pm is working
2. Line of action followed by the operating division
  - The processes each division in each region uses to do their work.

GSA PBS Project Manager Seminar Debriefing - discussion outline

3. Functional operations being carried out  
May be, in part, a function of the service grade and specialty of the pm
4. The nine major steps to effective project management
  - Step #1 Set goals and objectives
  - Step #2 Select project delivery system
  - Step #3 Prepare an action plan for what has to be done
  - Step #4 Translate the action plan into schedules
  - Step #5 Build the project organization
  - Step #6 Set an MX management system
  - Step #7 Get to work
  - Step #8 Measure progress and performance
  - Step #9 Close out the work

**C. How the project manager interacts in the three dimensions X, Y & Z**

1. With functional groups - debriefing discussion\*  
Internal  
External
2. With project groups - debriefing discussion\*  
Internal  
External

**V. The seminar mission**

To teach the principles and practice of effective project management to GSA PBS staff, whomever is in the class, and to teach these to the absolute limit of our abilities.

**VI. What the seminar student was supposed to learn - listed at random.**

- A. Communicating and decision making**
- B. Measuring project performance**
- C. Monitoring and controlling project costs**
- D. Principles of effective leadership**
- E. Principles of managing effectively**
- F. Project documentation and record keeping**
- G. Roles and responsibilities of the project manager**
- H. Scheduling and budgeting from the project plan**
- I. Systematic and effective project planning**
- J. Using automation in project management**

**VII. What we did in the regional seminars**

**A. Seminars presented**

1. Special series  
Chicago, Illinois ← Dec 1988  
Washington D. C. - management preview seminar ← Dec 1989
2. Regular series  
03/19/90 to 03/23/90 Philadelphia, Pennsylvania  
04/02/90 to 04/06/90 San Francisco, California

## GSA PBS Project Manager Seminar Debriefing - discussion outline

04/23/90 to 04/27/90	New York, New York
05/14/90 to 05/18/90	Chicago, Illinois
06/18/90 to 06/22/90	Fort Worth, Texas
07/09/90 to 07/13/90	Atlanta, Georgia
07/16/90 to 07/20/90	Kansas City, Missouri
09/10/90 to 09/14/90	Washington D. C.

### **B. General statistics for regular series**

1. Total class contact hours = 280
2. Participants receiving certificates = 286
3. Average class evaluation rating = 4.5 on a scale of 1 to 5

### **C. Actions taken with class**

1. Imparted elements of effective pm
  - By lecture
  - By workshop
  - By table work
  - By case studies
  - By symposium
2. Drilled students in practice of pm skills and techniques
3. Quizzed students - Presented 120 to 130 closed questions per seminar
4. Explained the use of about 45 specific project techniques

### **D. Seminar major content summary**

1. Cost management and control
2. Effective resource use
3. Introduction to project management principles
4. Managing people
5. Managing projects
6. Organizational interactions
7. Personal analysis for the project manager
8. Personal skills improvement for the project manager
9. Planning the project
10. Principles of good training
11. Project communications
12. Project management in GSA PBS
13. Project monitoring, measuring & controlling
14. Setting project goals and objectives
15. The project organization
16. Time management & control
17. Translating the project plan
18. Use of systems in project management

## **VIII. What our work with the regions showed us**

### **A. Participant feedback**

The rating sheets and the numeric scores indicated that the material was well received by the participants. It further confirmed that the subjects presented provided extended

GSA PBS Project Manager Seminar Debriefing - discussion outline

insights into today's design and construction profession.

**B. Topics of special interest - observed in and out of classroom**

1. Balancing time spent on functional and project duties
2. Contract document quality assurance
3. Decision making
4. Design/build delivery systems
5. Distinction between project and functional management
6. Ethical behavior in the planning, design and construction profession
7. Exertion of leverage on projects
8. Extended concepts of project delivery systems
9. Funds committed vs money spent relationships
10. How to operate at high professional levels
11. Network modeling basics
12. Personal computer software
13. Personal computing as a project management tool
14. Personal evaluation techniques
15. Personal to do lists
16. Processing of proposals through contracts division
17. Programming and validation of projects
18. Project and functional operating linkages
19. Project deficiency records
20. Qualities of a good project manager
21. Real estate considerations in project management
22. Risk assignment
23. Setting selection standards
24. Sources of project manager talent
25. Standard project terminology
26. Systems concepts for the project manager
27. Technography
28. The need to add value to the project
29. Use of quizzes to improve the knowledge retained level
30. Use of the single number filing system

**C. Items of special concern - as observed from participants**

1. Blurred organizational relationships
2. Class disruptions during learning process
3. Conflict in policy from region to region
4. Confusion as to what types of project delivery systems are allowable
5. Difficulties in maintaining project continuity
6. Imbalance in authority vested and responsibility assigned
7. Lack of adequate project manager guidelines
8. Lack of administrative support services
9. Lack of continuity at appointee levels in GSA PBS
10. Lack of cross training



## GSA PBS Project Manager Seminar Debriefing - discussion outline

11. Lack of pm clout in dealing with professional service and construction contractors
  12. Lack of project manager clout within regional divisions
  13. Lack of project manager role definition
  14. Lack of storage and retrieval systems for historical data
  15. Lack of visible upper management seminar participation (some regions only)
  16. Large numbers of projects assigned to a single project manager
  17. Length of contracts processing time
  18. Need for better method of storing and retrieving construction record sets
  19. Overtraining for positions that may not be available in GSA PBS
  20. Policy & procedural differences between operating divisions
  21. Poor professional service contractor performance
  22. Properly crossing critical transition lines and zones
  23. Redundantly layered external operations
  24. Restrictions on types of project delivery systems that are permissible
  25. Skepticism that a macro project management system will work given the present GSA PBS structure
  26. Source of cadre for the project manager staff
  27. The CQM role in projects
  28. The future for the functional expert within GSA PBS
  29. The temporary nature of project organization
- D. Projections of GSA's future as perceived by seminar participants**
1. To be discussed in debriefing session\*
- E. Desirable characteristics of candidates for project manager positions**
- These are what we observed as characteristics needed to properly manage projects of the type upon which most of the seminar attendees were engaged.
1. Accurately comprehend scope of project
  2. Can be creative
  3. Can take authority and then earn it
  4. Communicate effectively
  5. Desire & achieve excellence
  6. Ethical
  7. Express ideas well
  8. Follow an effective mode of action
  9. Have endurance
  10. Have good education
  11. Have good sense of humor
  12. Have integrity
  13. Have potential for improvement
  14. Have technical and professional credentials

GSA PBS Project Manager Seminar Debriefing - discussion outline

15. Honest
16. Identify trends accurately
17. Innovative
18. Intelligent
19. Intelligently consistent
20. Intelligently inquisitive
21. Know how to collect essential information
22. Lead well
23. Listen & learn
24. Make good decisions
25. Make timely decisions
26. Manage conflict well
27. Manage people well
28. Motivate others
29. Move from micro to macro and back again at will
30. Open and close systems well
31. Organize and link activities
32. Patient
33. Perceive problems
34. Plan ahead
35. Resolve problems effectively
36. Respond to legitimate demands
37. Trained well
38. Understand cause/effect relations
39. Understand the role of profit in our society
40. Unite people groups
41. Use hindsight to look at the future
42. Utilize resources effectively
43. Work well with people

***IX. How the GSA project manager adds value to the project***

***A. Student perceptions of value they add to a project***

Derived from surveys of the Atlanta, Kansas City & Washington D.C. project management classes.

1. Total responses from three regions = **155** mentions  
Management skill = **60** mentions

Examples of frequently mentioned values added

- Ability to coordinate actions
- Ability to foresee problems
- Ability to lead and manage
- Ability to solve problems
- Addition of continuity to project
- Keeping project on schedule
- Keeping project within budget
- Knowledge of the project management process
- Making timely decisions

GSA PBS Project Manager Seminar Debriefing - discussion outline

- Monitoring the project
- Project management skills
- Provision of attention to detail
- Starting projects on time

Technical knowledge = **53** mentions

Examples of frequently mentioned values added

- Abilities to focus on the design process
- As a technical consultant during construction
- Design and construction experience
- Design and construction procedures knowledge
- Design review ability
- Expertise in construction contract management
- Knowing the project development process
- Knowledge of problems and failures
- Skills in client relations and reviewing contract documents

GSA system & process know how = **20** mentions

Examples of frequently mentioned values added

- Knowledge of government process
- Knowledge of procurement process
- Knowledge of agencies involved

People and communications = **19** mentions

Examples of frequently mentioned values added

- Experience in working with people
- Ability to identify customer needs
- Ability to develop clear channels of communications
- Ability to translate information

Eagerness to learn - **3** mentions

**B. GSA management desired value added**

**Pivotal question** - What value does the GSA PBS management wish, or want, or demand, or expect, the project manager to add to the project?

1. To be discussed in debriefing session\*

**C. Actual value added**

1. To be discussed in debriefing session\*

How do we measure value added

Might start with the 37 elements of importance as a standard of performance

See rjs ho #341 - GSA PM book ho #1.34, 1.35, 1.36 & 1.37

**X. Project relations of GSA PBS with external agencies with whom they must interact**

**A. To be discussed in debriefing session\***

**B. Might include**

## GSA PBS Project Manager Seminar Debriefing - discussion outline

1. Facility occupants
2. Functional governmental agencies adding value to GSA PBS projects
3. Governmental agencies at regional, state and local levels
4. Governmental clients or customers
5. Private clients or customers
6. Private construction contract organizations
7. Private professional service organizations

### **XI. How GSA can optimize the use of project manager training**

#### **A. The overview**

1. Discover boundaries of talent available
  - a. Internal
  - b. External
2. Discover boundaries of client needs
3. Discover boundaries of GSA PBS needs
4. Discover GSA PBS boundaries that align with client expectations
5. Match talents available, client needs & GSA PBS needs with the expectations

#### **B. The details - to be addressed in debriefing sessions\***

### **XII. Recommendations**

#### **A. Refine and expand the Project Management Guide**

#### **B. Prepare a Project Management Manual of Practice**

#### **C. Develop regional project management training sessions**

1. To train present project managers
2. To train prospective project managers
3. To orient those who must work within the project management system

#### **D. Build an automated regional GSA PBS project information network**

#### **E. Build an automated national GSA PBS project information network**

#### **F. Build regional and national project information data bases for improved decision making**

#### **G. Develop and implement a quality assurance plan**

1. To monitor design
2. To monitor construction

#### **H. Set system of measuring value added by effective project management**

#### **I. Improve management balancing of responsibility and authority**

1. Formally
2. Informally

#### **J. Improve effectiveness of relations between project managers and contract officers**

#### **K. Improve GSA user need identification and programming**

#### **L. Improve linkages between project management and field operations during construction**

GSA PBS Project Manager Seminar Debriefing - discussion outline

- M. Develop GSA PBS project manager position description and performance model***
- N. Establish project delivery management models for various kinds of projects***

## ***Considerations Around Which This Debriefing Session is Built***

- A. The mission of GSA PBS.**
- B. The macro boundaries of the GSA PBS mission.**
- C. The organizational location of the project manager's work.**
- D. What the student was supposed to learn in the seminar.**
- E. What we did in the regional seminars.**
- F. What our work with the regions showed us.**
- G. How the GSA PBS project manager adds value to the project.**
- H. Project relations of GSA PBS with external agencies with whom they must interact.**
- I. How GSA PBS can optimize the use of the project manager training.**
- J. Recommendations.**

## ***The mission of GSA PBS***

**To successfully accomplish major facility acquisition, upgrading and management as required to meet the needs of client government agencies.**

## ***GSA PBS macro matrix components***

### ***X axis - Line of action***

**X 1 - Determine need** - Community plan and building evaluation

**X 2 - Prepare program of requirements** - Prospectus development study

**X 3 - Validate and approve scope & cost** - Approval & funding

**X 4 - Acquire site** - Pre design activity

**X 5 - Design project** - Obtain client/tenant & regulatory input & prepare final construction documents

**X 6 - Execute pre construction activities** - Swing space occupancy, relocations, construction contracts, phasing, mobilization

**X 7 - Develop site** - Base construction

**X 8 - Build out for tenants** - Tenant requirements, partitions, interiors & secondary distribution systems



## ***GSA PBS macro matrix components***

*Y axis - Functional Operating Divisions*

**Y 1 - Management support**

**Y 2 - Real properties and safety**

**Y 3 - Contracts**

**Y 4 - Design & construction**

**Y 5 - Real estate**

**Y 6 - Planning**

## ***GSA PBS macro matrix components***

### ***Z axis - Functional Operations***

**Z 1 - Planning**

**Z 2 - Real estate**

**Z 3 - Architecture**

**Z 4 - Engineering**

**Z 5 - Contracts**

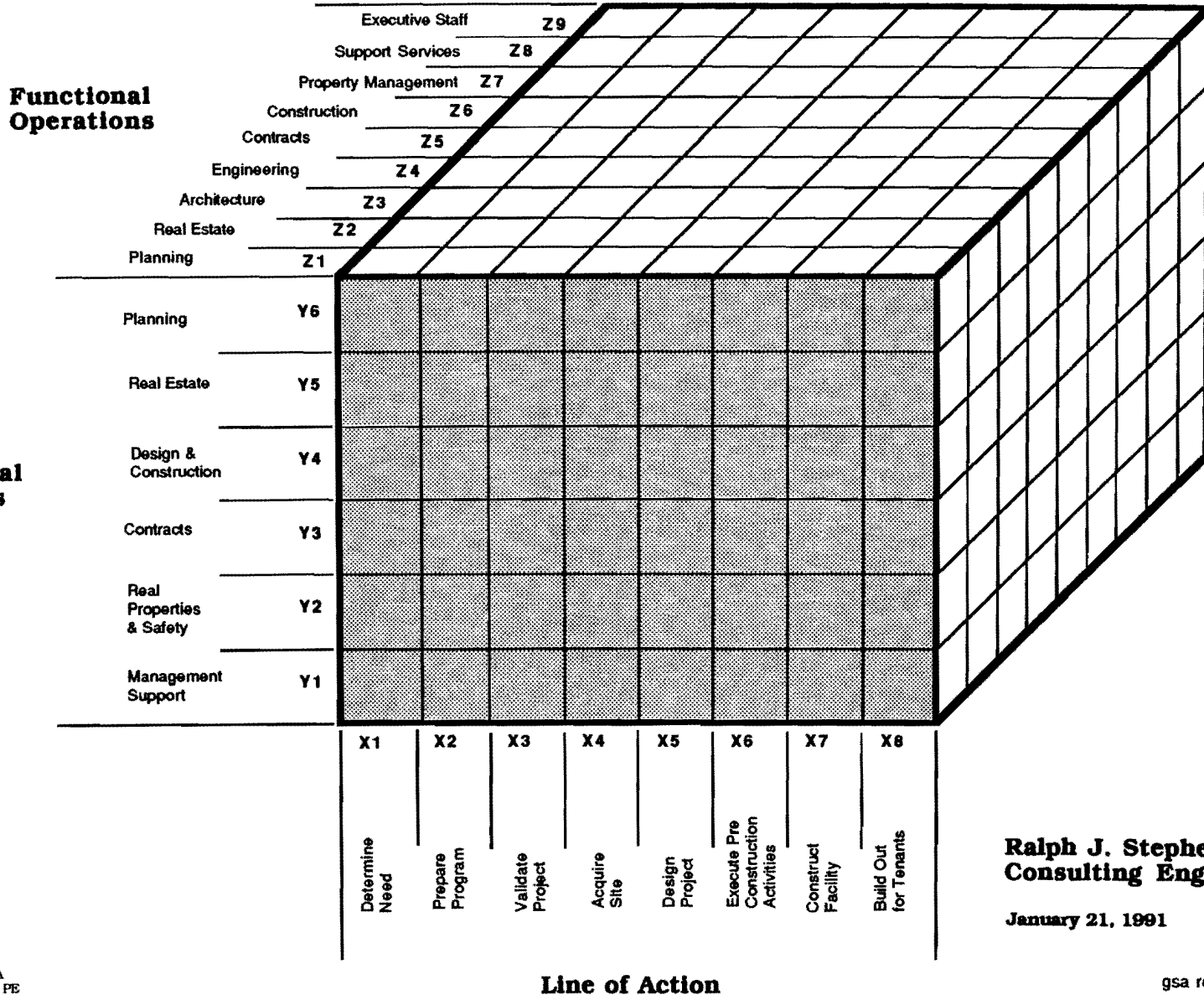
**Z 6 - Construction**

**Z 7 - Property management**

**Z 8 - Support services**

**Z 9 - Executive staff operations**

# GSA Matrix of Project Management Operations

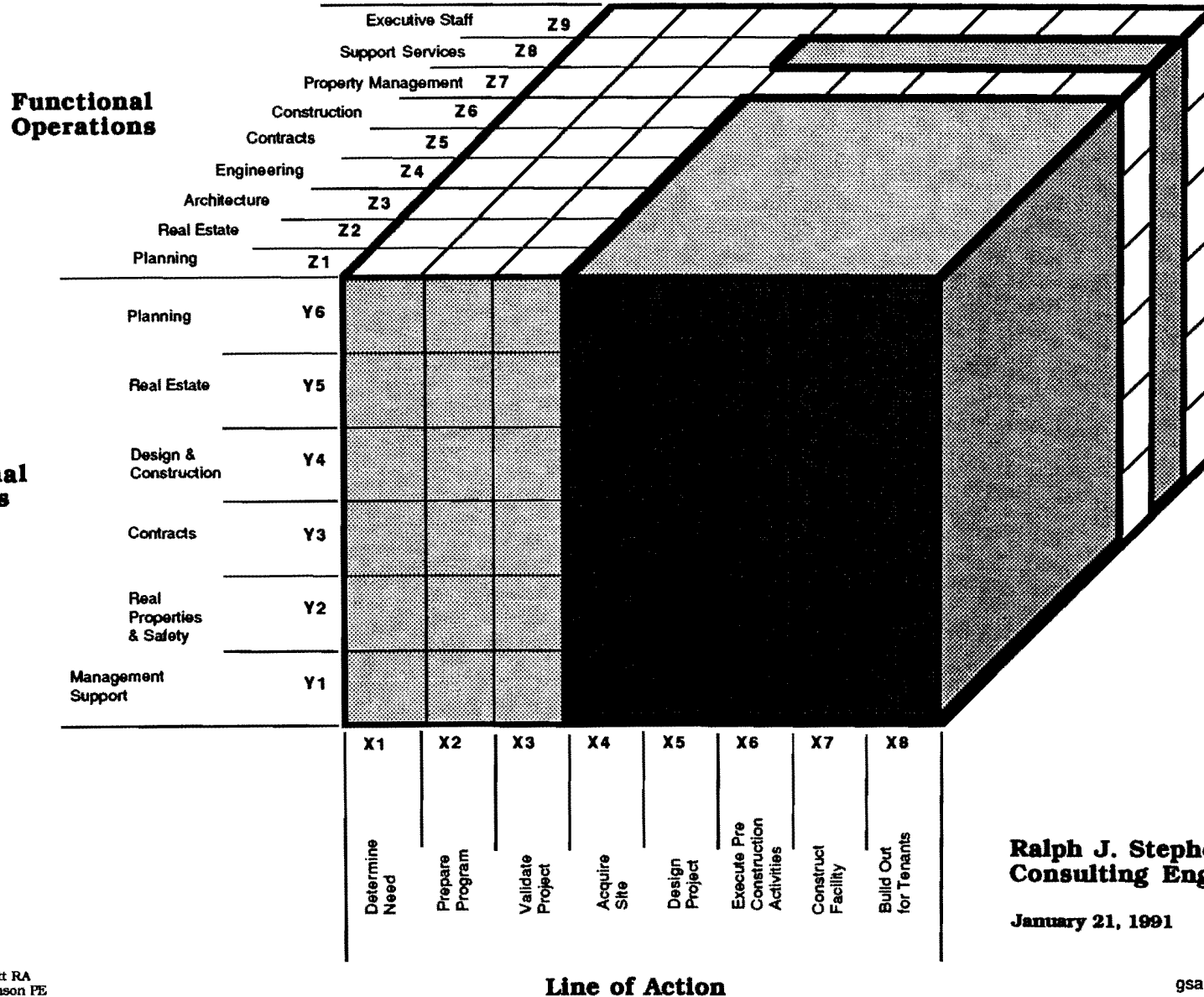


**Ralph J. Stephenson PE**  
**Consulting Engineer**

January 21, 1991

# GSA Matrix of Project Management Operations

Current macro boundaries of project manager's work

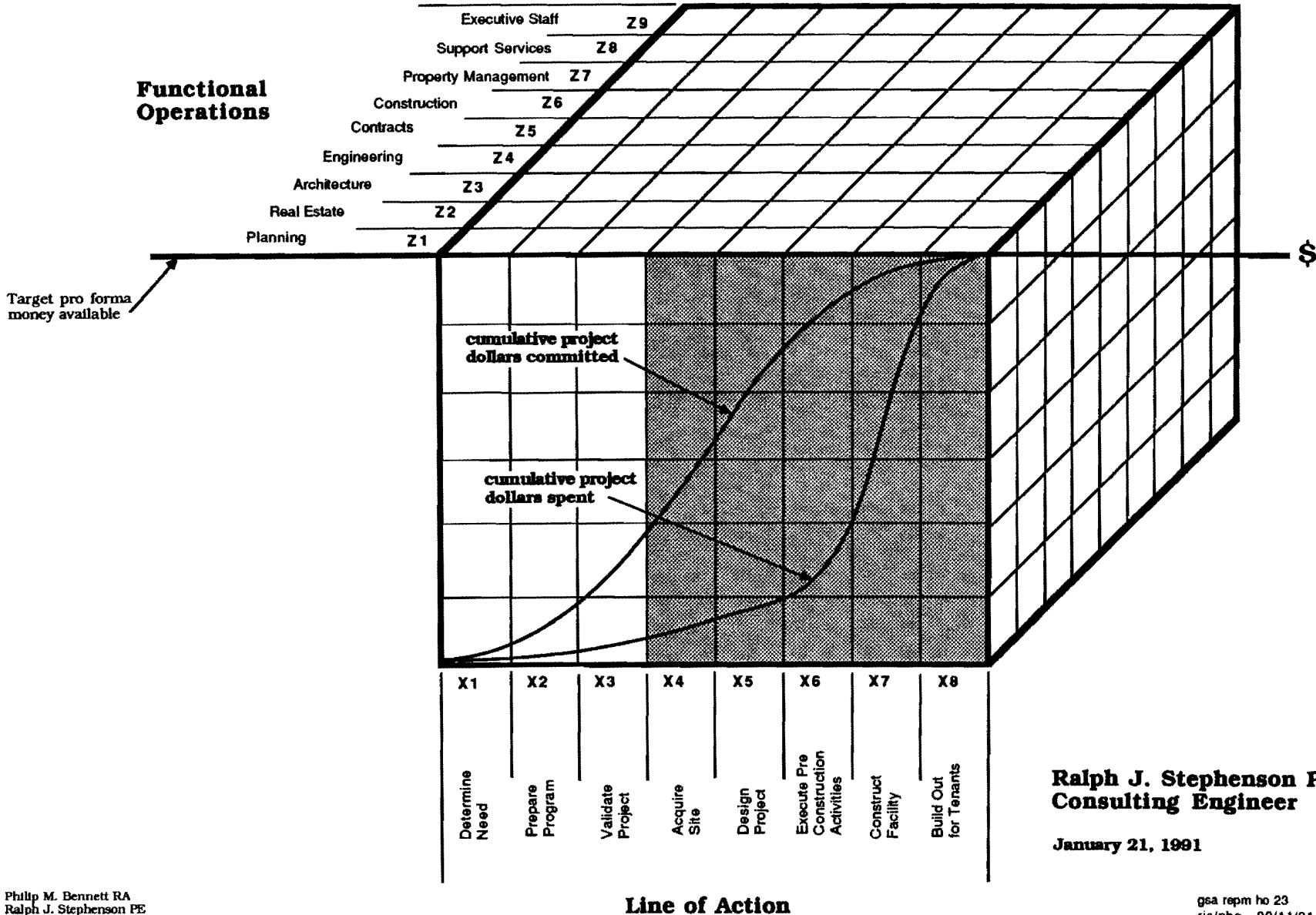


**Ralph J. Stephenson PE**  
Consulting Engineer

January 21, 1991

# GSA Matrix of Project Management Operations

## Costs Committed Compared to Money Spent



**Ralph J. Stephenson PE**  
**Consulting Engineer**

January 21, 1991

## ***Costs Committed / Money Spent***

- **Committed costs are promised funds for purposes, that if such purposes are aborted a penalty must be paid.**

### ***Types of penalties & losses may include:***

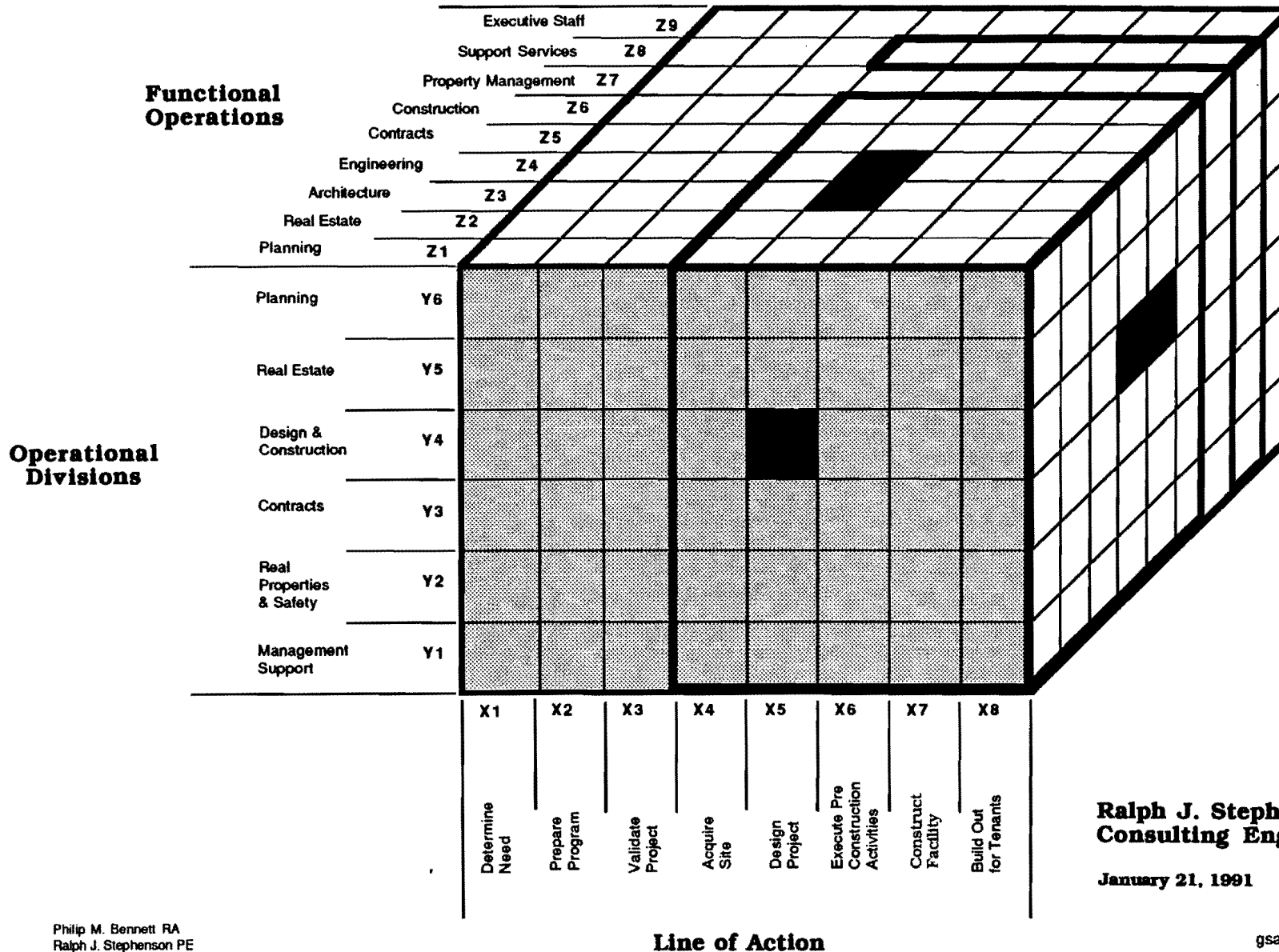
- **OPTION COSTS**
- **RIGHT OF FIRST REFUSAL COSTS**
- **LEGAL FEES**
- **EARLY ENGINEERING FEES**
- **EARLY PLANNING FEES**
- **DISPLEASURE OF CONGRESS**
- **STAFF TIME EXPENDITURES**
- **LOSS OF CREDIBILITY**
- **LOSS OF OPPORTUNITY**

## ***Items that define the pm's individual work within a court of action***

- **Operating division within which the pm is working**
- **Line of action followed by the operating division**
- **Functional operations being carried out**
- **The nine major steps to effective project management**
  - #1 - Set goals and objectives**
  - #2 - Select project delivery system**
  - #3 - Prepare an action plan for what has to be done**
  - #4 - Translate the action plan into schedules**
  - #5 - Build the project organization**
  - #6 - Set an MX management system**
  - #7 - Get to work**
  - #8 - Measure progress and performance**
  - #9 - Close out the work**

# GSA Matrix of Project Management Operations

Current macro boundaries of project manager's work

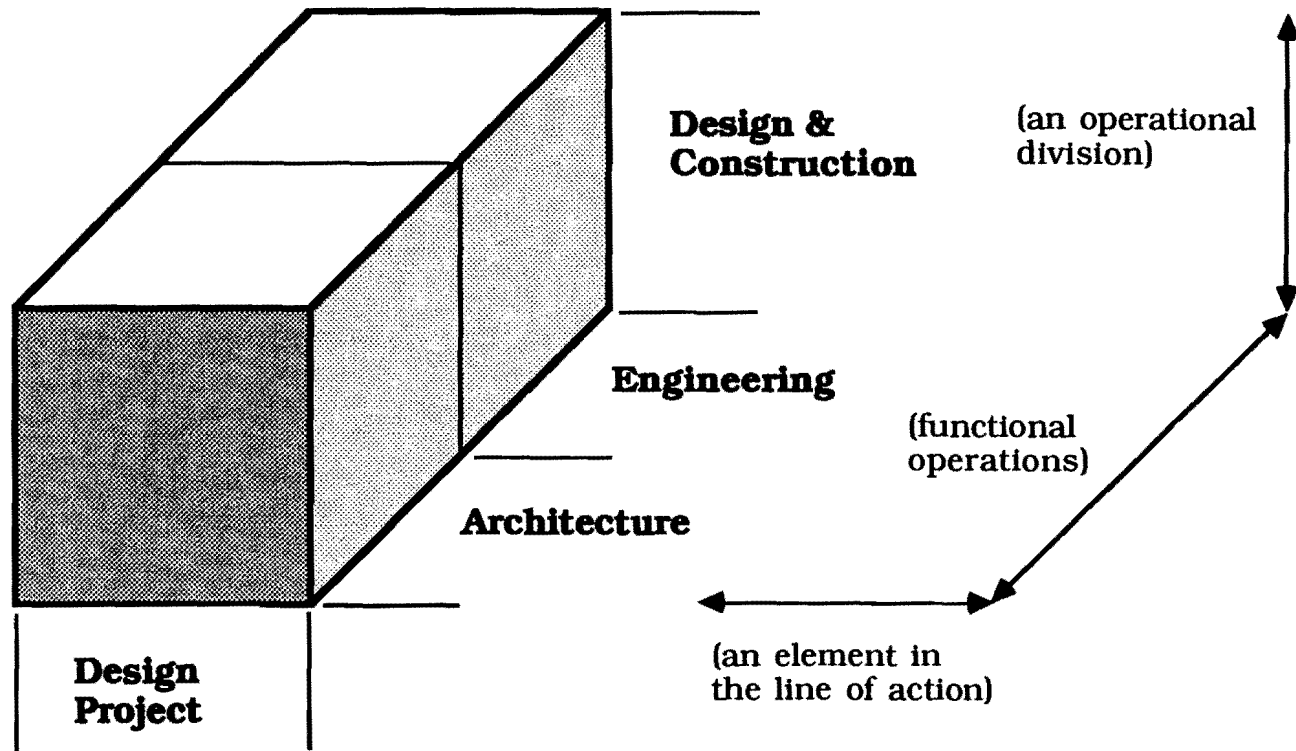


**Ralph J. Stephenson PE**  
Consulting Engineer

January 21, 1991



12



**Ralph J. Stephenson PE**  
**Consulting Engineer**

January 21, 1991

Philip M. Bennett RA  
Ralph J. Stephenson PE

## ***Court of Action***

gsa repm ho 08  
rjs/pbe 02/11/91

## ***The Seminar Mission***

**To teach the principles and practices of effective project management to GSA PBS staff, whomever is in the class, and to teach these subjects to the absolute limit of our abilities.**

## ***What the Seminar Student Was Supposed to Learn***

- **Communicating and decision making**
- **Measuring project performance**
- **Monitoring and controlling project costs**
- **Principles of effective leadership**
- **Principles of managing effectively**
- **Project documentation and record keeping**
- **Roles and responsibilities of the project manager**
- **Scheduling and budgeting from the project plan**
- **Systematic and effective project planning**
- **Using automation in project management**

## ***Seminars Presented***

### ***. Special series***

**Chicago, Illinois**

**Washington D. C. - management preview seminar**

### ***. Regular series***

**03/19/90 to 03/23/90 Philadelphia, Pennsylvania**

**04/02/90 to 04/06/90 San Francisco, California**

**04/23/90 to 04/27/90 New York, New York**

**05/14/90 to 05/18/90 Chicago, Illinois**

**06/18/90 to 06/22/90 Fort Worth, Texas**

**07/09/90 to 07/13/90 Atlanta, Georgia**

**07/16/90 to 07/20/90 Kansas City, Missouri**

**09/10/90 to 09/14/90 Washington D. C.**

# ***Project Management Seminar***

## ***Statistics & Actions***

**Total class contact hours = 280**

**Participants receiving certificates = 286**

**Average class rating = 4.5 on a scale of 1 to 5**

**Actions taken with class**

- **Imparted elements of effective pm**
  - By lecture**
  - By workshop**
  - By table work**
  - By case studies**
  - By symposium**
- **Drilled students in pm skills & techniques**
- **Quizzed classes - Presented 120 to 130 closed questions per seminar**
- **Explained the use of about 45 specific project management techniques**

## ***Seminar Major Content Summary***

- **Cost management and control**
- **Effective resource use**
- **Introduction to project management principles**
- **Managing people**
- **Managing projects**
- **Organizational interactions**
- **Personal analysis for the project management**
- **Personal skills improvement for the pm**
- **Planning the project**
- **Principles of good training**
- **Project communications**
- **Project management in GSA PBS**
- **Project monitoring, measuring & controlling**
- **Setting project goals and objectives**
- **The project organization**
- **Time management and control**
- **Translating the project plan**
- **Use of systems in project management**

## ***What Our Work With the Regions Showed Us***

### **• *Participant feedback***

**The rating sheets and the numeric scores indicated that the material was well received by the participants. It further confirmed that the subjects presented provided extended insights into today's design and construction profession.**

### **• *Topics of special interest***

- **Balancing time spent on functional and project duties**
- **Contract document quality assurance**
- **Decision making**
- **Design/build delivery systems**
- **Distinction between project & functional management**
- **Ethical behavior in the planning, design and construction profession**
- **Exertion of leverage on projects**
- **Extended concepts of project delivery systems**
- **Funds committed vs money spent relationships**
- **How to operate at high professional levels**
- **Network modeling basics**
- **Personal computer software**

- **Personal computing as a project management tool**
- **Personal evaluation techniques**
- **Personal to do lists**
- **Processing of proposals through contracts division**
- **Project and functional linkages**
- **Programming and validation of projects**
- **Project deficiency records**
- **Qualities of a good project manager**
- **Real estate considerations in project management**
- **Risk assignment**
- **Setting selection standards**
- **Sources of project manager talent**
- **Standard project terminology**
- **Systems concepts for the project manager**
- **Technography**
- **The need to add value to the project**
- **Use of quizzes to improve the knowledge retained level**
- **Use of the single number filing system**



## ***What Our Work With the Regions Showed Us***

- ***Items of special concern***

- **Blurred organizational relationships**
- **Class disruptions during learning process**
- **Conflict in policy from region to region**
- **Confusion as to what types of project delivery systems are allowable**
- **Difficulties in maintaining project continuity**
- **Imbalance in authority vested and responsibility assigned**
- **Lack of adequate project manager guidelines**
- **Lack of administrative support services**
- **Lack of continuity at appointee levels in GSA PBS**
- **Lack of cross training**
- **Lack of pm clout in dealing with professional service and construction contractors**
- **Lack of pm clout within regional divisions**
- **Lack of project manager role definition**
- **Lack of storage and retrieval systems for historical data**
- **Lack of visible upper management seminar participation (some regions only)**
- **Large numbers of projects assigned to a single project**

**manager**

- **Length of contracts processing time**
- **Need for better method of storing and retrieving construction record sets**
- **Overtraining for positions that may not be available in GSA PBS**
- **Policy & procedural differences between operating divisions**
- **Poor professional service contractor performance**
- **Properly crossing critical transition lines & zones**
- **Redundantly layered external operations**
- **Restrictions on types of project delivery systems that are permissible**
- **Skepticism that a macro project management system will work given the present GSA PBS structure**
- **Source of cadre for the project manager staff**
- **The CQM role in projects**
- **The future for the functional expert within GSA PBS**
- **The temporary nature of project organization**

## ***Desirable Characteristics of Candidates for Project Manager Positions***

- **Accurately comprehend scope of work**
- **Can be creative**
- **Can take authority and then earn it**
- **Communicate effectively**
- **Desire & achieve excellence**
- **Ethical**
- **Express ideas well**
- **Follow an effective mode of action**
- **Have endurance**
- **Have good education**
- **Have good sense of humor**
- **Have integrity**
- **Have potential for improvement**
- **Have technical and professional credentials**
- **Honest**
- **Identify trends accurately**
- **Innovative**
- **Intelligent**
- **Intelligently consistent**
- **Intelligently inquisitive**

- **Know how to collect essential information**
- **Lead well**
- **Listen & learn**
- **Make good decisions**
- **Make timely decisions**
- **Manage conflict well**
- **Manage people well**
- **Motivate others**
- **Move from micro to macro and back again at will**
- **Organize and link activities**
- **Patient**
- **Perceive problems**
- **Plan ahead**
- **Resolve problems effectively**
- **Respond to legitimate demands**
- **Trained well**
- **Understand cause/effect relations**
- **Understand the role of profit in our society**
- **Unite people groups**
- **Use hindsight to look at the future**
- **Utilize resources effectively**
- **Work well with people**

## ***Student Perceptions of Value They Add to A Project***

- ***Derived from surveys of the Atlanta, Kansas City & Washington D.C. project management classes***

**Total responses from three regions = 155  
mentions**

- ***Examples of frequently mentioned values added***
  - **Management skill = 60 mentions**
    - Ability to coordinate actions
    - Ability to foresee problems
    - Ability to lead and manage
    - Ability to solve problems
    - Addition of continuity to project
    - Keeping project on schedule
    - Keeping project within budget
    - Knowledge of the project management process
    - Making timely decisions
    - Monitoring the project
    - Project management skills
    - Provision of attention to detail
    - Starting projects on time

• **Technical knowledge = 53 mentions**

- **Abilities to focus on the design process**
- **As a technical consultant during construction**
- **Design and construction experience**
- **Design and construction procedures knowledge**
- **Design review ability**
- **Expertise in construction contract management**
- **Knowing the project development process**
- **Knowledge of problems and failures**
- **Skills in client relations and reviewing contract documents**

• **GSA system & processes know how = 20 mentions**

- **Knowledge of government process**
- **Knowledge of procurement process**
- **Knowledge of agencies involved**

• **People and communications = 19 mentions**

- **Experience in working with people**
- **Ability to identify customer needs**
- **Ability to develop clear channels of communications**
- **Ability to translate information**

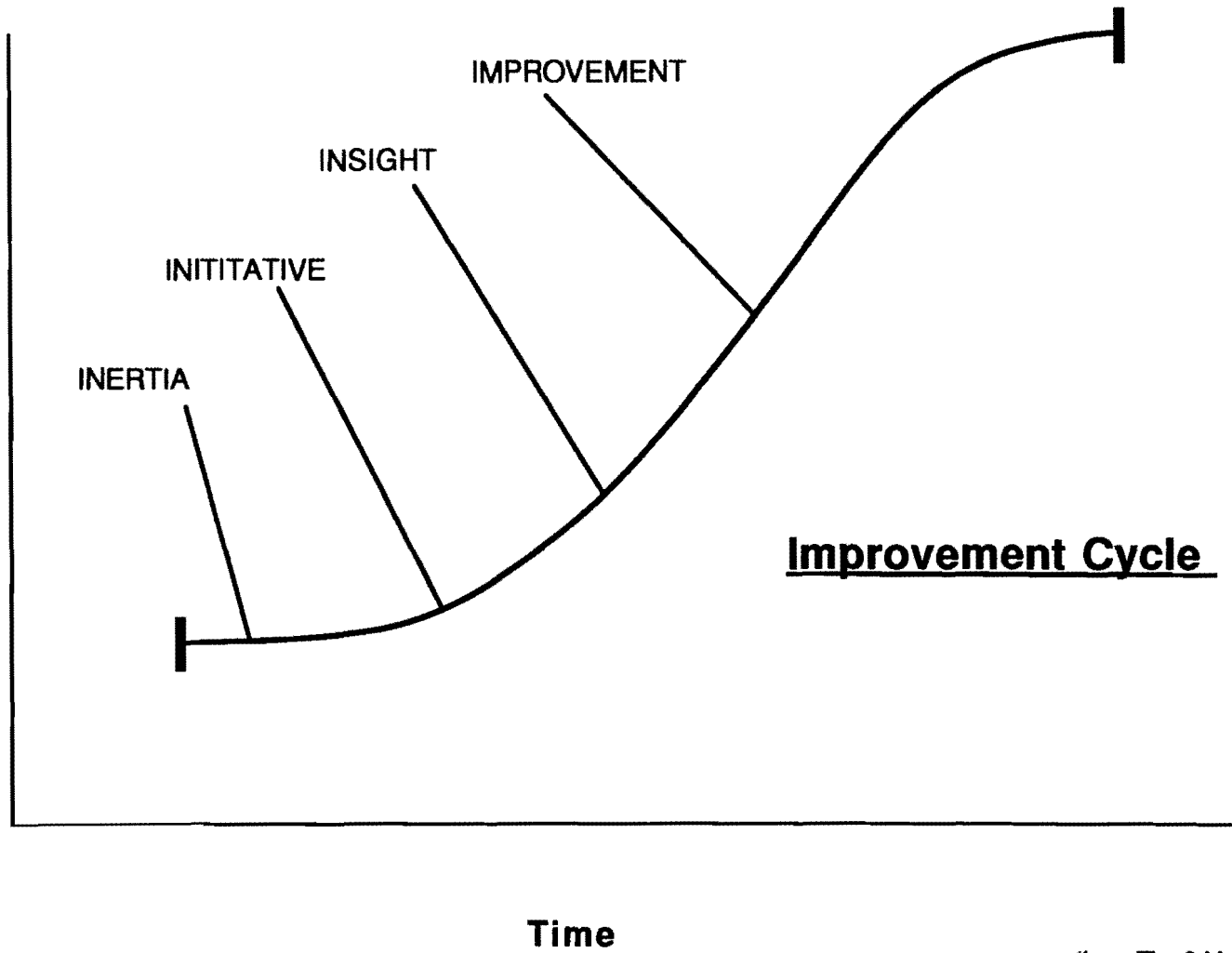
• **Eagerness to learn = 3 mentions**

Ralph J. Stephenson PE  
Consulting Engineer

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↑  
Positive  
Performance



(from The 9 Master Keys  
to Management - Lester  
R. Bittle)

# ***How GSA PBS Can Optimize the Use of Project Management Training?***

## **A. The Overview**

- **Discover boundaries of talent available**
  - **Internal**
  - **External**
- **Discover boundaries of client needs**
- **Discover boundaries of GSA PBS needs**
- **Discover GSA PBS boundaries that align with client expectations**
- **Match the talents available, the client needs & the GSA PBS needs with the client expectations**
- **Begin filling in the areas of technical, professional and management deficiencies by selective additional education, training and coaching.**

## **B. The details - to be addressed in recap sessions**



# ***Recommendations for Improving GSA PBS Project Management Operations***

- **Refine and expand the Project Management Guide**
- **Prepare a Project Management Manual of Practice**
- **Develop regional project management training sessions**
  - **To train present project managers**
  - **To train prospective project managers**
  - **To orient those who must work within the pm system**
- **Build an automated regional GSA PBS project information network**
- **Build an automated national GSA PBS project information network**
- **Build regional and national project information data bases for improved decision making**
- **Develop and implement a quality assurance program**
- **Set system of measuring value added by effective project management**
- **Improve management balancing of responsibility and authority**
- **Improve effectiveness of relations between project managers and contract officers**
- **Improve GSA user need identification and programming**
- **Improve linkages between project management and field operations during construction**
- **Develop GSA PBS project manager position description and performance model**
- **Establish project delivery management models for various kinds of projects**

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## *Appendix A - GSA PBS Project Management Matrix*

**X axis** - shows the the line of action as generally articulated in GSA literature.

**Y axis** - shows the operational divisions of the GSA PBS.as presented in various agency guidelines

**Z axis** - shows GSA PBS functional operations as derived from GSA PBS literature and guidelines, and from related conversations with GSA PBS staff. We have tried to insure that each operation listed for the Z axis is a specific function that somebody in GSA PBS has to fulfill.

• **X axis** - The line of action

- X1 - Determine need - Community plan and building evaluation
- X2 - Prepare program of requirements - Prospectus development study
- X3 - Validate and approve scope & cost - Approval & funding
- X4 - Acquire site - Pre design activity
- X5 - Design project - Obtain client/tenant & regulatory input & prepare final construction documents
- X6 - Execute pre construction activities - Swing space - relocations, construction contracts, phasing, mobilization
- X7 - Develop site - Construct facility
- X8 - Build out for tenants - Tenant requirements, partitions, interiors & secondary distribution systems

• **Y axis** - Functional operating divisions

- Y1 - Management support staff
- Y2 - Real property management and safety division
- Y3 - Contracts division
- Y4 - Design & construction division
- Y5 - Real estate division
- Y6 - Planning

• **Z axis** - Functional operations to be accomplished by GSA PBS

- Z1 - Planning
  - Commuter studies
  - Economic studies and analyses
  - Estimating
  - Facility master planning
  - Feasibility studies
  - Historic preservation
  - Land planning
    - Community
    - Historic
    - Urban
    - Rural
    - Site
  - Market analysis
  - Model making
  - Political liaison

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Programming  
Social planning  
Traffic analyses  
Zoning changes  
Pro forma analyses

Z2 - Real estate  
Land & improvements  
Control  
Purchase  
Option  
Right of first refusal  
Exchange  
Other  
Site surveys  
Appraisals  
Zoning changes  
Political liaison  
Leasing  
Pro forma analyses

Z3 - Architecture  
Budgeting  
Material research  
Action planning and scheduling  
Architectural design  
Architectural production  
Building surveys  
Estimating  
Feasibility analyses  
Food service design  
Pro forma analyses  
Graphics  
Historic preservation  
Inspection  
Inspections  
Interior design  
Special technical disciplines  
Landscaping  
Model making  
Production  
Programming  
Quality assurance  
Specifications

Z4 - Engineering  
Budgeting  
Pro forma analyses  
Material research  
Abatement  
Action planning and scheduling  
Acoustical  
Building surveys  
Civil

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Construction document quality assurance  
Electrical  
Energy conservation  
Environmental assessments  
Environmental impact analyses  
Estimating  
Feasibility studies  
Special technical disciplines  
Geotechnical  
Inspections  
Material handling  
Inspections  
Life safety systems  
Mechanical  
Programming  
Site utilities  
Specifications  
Structural  
Telecommunications  
Traffic analyses

**Z5 - Contracts**

Contract administration  
Maintain contract data  
Procurement  
    Professional services  
    Construction services  
    Building services  
    Equipment  
    Materials  
    Supplies  
    Building services  
    Security  
    Concessions  
Purchasing  
Specifications

**Z6 - Construction**

New buildings  
Site improvements  
Building repairs  
Building alterations  
Construction administration  
Construction planning and scheduling

**Z7 - Property management**

Leasing  
Maintenance  
Safety  
Security  
Space inventories  
Space utilization

**Z8 - Support services**

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Accounting  
Data processing  
Education and training  
Facility inventories  
Filing  
Graphics, reports and presentation preparation  
Information systems operations  
Legal  
Office management  
Personnel  
Stenographic

**Z9 - Executive staff operations**

Funding  
Interagency liaison  
Organizational planning  
Political liaison  
Project management  
Marketing  
Sales  
Other executive operations