

## Topic priorities

1. Planning for development
2. Bid proposals
3. Construction mgnt.
4. Building codes
5. Cost estimating
6. Work sequencing
7. Site selection/mgnt
8. Zoning laws
9. Work schedule
10. Permits
11. Scope of work
12. Construction manager fit into process
13. Legal concerns
14. Inspection

## Topic priorities, cont.

15. Material selection
16. Short term planning
17. Labor supervision
18. Project mgnt meetings
19. Transportation logistics
20. City planning
21. Hidden problems
22. Government bidding
23. Setting up a small business
24. Tour

## Facilities Planning

From ideas to plans!

## Objectives for Facility Planning Section

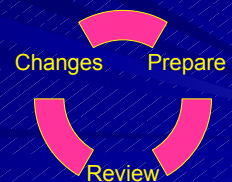
- Define facilities planning
- Define steps to go from ideas to plan
- Understand tools that will ease the process
- Practice principles by developing a plan

## Objectives of Facilities Planning

- Define a facility to meet the objectives of the owner
  - Building(s)
  - Outside equipment
  - Infrastructure to support the facilities
- Match facility and budget
- Information for obtaining a construction contract

## Planning steps General to specific

- General description
- List of spaces/functions
- Relationships between
- Details for each



## OSU Program of Requirements, 1

- Document to formally define project
- Project Overview
  - Project Scope
  - Project Mission
  - Project Objectives
  - Total project budget

## Facility planning tools

- Development of project scope
  - Verbal
    - Individual meetings
    - Group meetings
    - Summary and feed back to group
  - Written
    - Reports or summary documents
    - Sketches showing relationship of spaces
    - Overlays to explore options

## OSU Program of Requirements, 2

- Using agency information
  - Space program summary, table
  - Space program details
    - Priority
    - Quantity
    - Assignable square footage
    - Number of occupants
    - Use
    - Fixed and movable equipment
    - Utilities
    - Special requirements

## OSU Program of Requirements, 3

- Project Information – project specific issues not addressed
  - Infrastructure issues
  - Open civic space issues
  - Hazardous materials/ abatement
  - Siting issues
  - Signage/way finding
  - Furniture, fixtures, and equipment
  - Transportation and parking issues

## Factors affecting space size

- Function and type of room
  - Individual offices versus landscape offices
- Number of occupants
- Type and size of equipment
  - Size of room and size of opening(s)
- Type and size of furniture
- Amount of material to be stored
- Access space

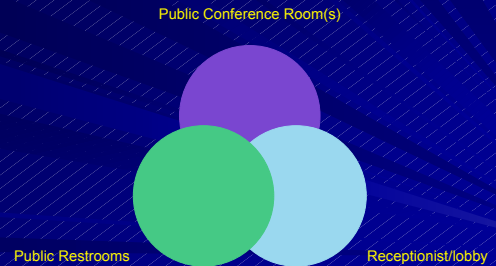
## Relationship of spaces, 1

- Functions complement each other
  - Shipping and material storage rooms
- Keep key groups of people together
- Separate public areas from private areas
  - Reception/lobby/conference room clearly identified and easily accessible from public parking
  - Key card access to remainder of the building.

## Relationship of spaces, 2

- Utility requirements
  - Bathrooms back to back and stacked above each other
  - High power electric needs close to electric entrance
- Separate dirty areas from clean areas
- Improve work flow and/or communications

## Space diagrams



## Material flow concepts, 1

- Keep flow in as straight a line as possible
- Clearly identify each entry point for different materials
- Receiving to storage
- Storage to processing/manufacturing
- Processing/manufacturing to shipping or finished product storage
- Staging areas at key sites
  - Boxes to be used in packing potato chip bags

## Material flow concepts, 2

- Methods of moving materials
  - Tow motors
  - Conveyors
  - Push carts
  - Augers
  - Elevators

## Americans with Disabilities Act (ADA)

- Sets requirements for access to buildings and areas within buildings
- Defines minimum clearances
- Defines acceptable reaches
- Define number of special provisions, e.g. number of apartments that are accessible in an apartment complex

## Renovation and expansion

- Define needs as if new
  - Do not look at existing
  - Do not THINK about the existing
  - Do not consider the existing!!