

# NYBA 2004 Annual Meeting

## BIOTECH IN NEW YORK - TAKING IT TO THE NEXT LEVEL

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Ross F. Moskowitz, Panel Chair

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## Session Description

A challenge for the NY biotechnology cluster is accessing enough space to perform the research. This program focuses on the “Here” aspect of “The Cure Starts Here<sup>TM</sup>”.

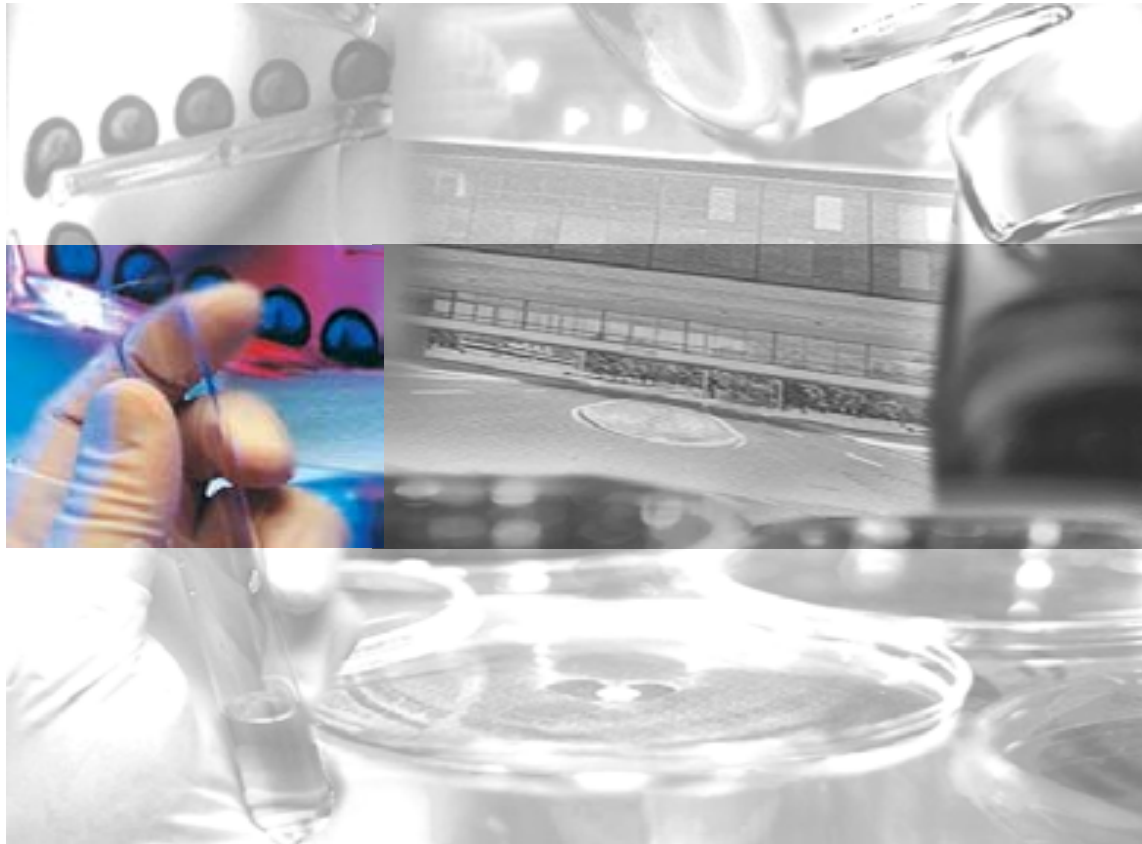
- **Strategic Planning – Coming and Going**
- **Location, Location, Location**
- **Infrastructure Requirements In A Nutshell**
- **Give Me A Break – What Biotech Companies Really Need From Government**

# Strategic Planning – Coming and Going

- What constitutes a good locality?
  - Critical Mass
  - Accessibility
- Developer/Operator issues
  - Minimum Rents
  - Tenant Mix
  - Exit Strategy
- Short term vs. long term decision making
- What's more important?
  - Science
  - Location

# Biotech in New York

## Locational Issues Issues and Factors



# Locational Issues and Factors

## Technology and R&D Location Selections

- Technology and R&D location selections are driven by the search for intellectual capital – increasingly mobile, even in Europe and Asia
  - ◆ Go where there is a critical mass and a pipeline of talent
    - Recognized clusters of skill already in place
    - Recruit people from competitors
    - Compete for new talent locally as they graduate (or before)
  - ◆ Go where people will look forward to living
    - National, regional, global recruiting
    - Internal transfers

# Locational Issues and Factors

## Deployment Criteria

Technology enables companies to site functions globally, based on relative importance of site selection factors

	Workforce	Quality of Life	Business Environment	Cost
Headquarters	5	5	5	1
R&D and Technology	5	4	4	2
Administrative/ Customer care	4	2	3	5
Capital Intensive Production	4	2	3	3
Labor Intensive Production	2	1	2	5



# Locational Issues and Factors

## Quality of Life

- Quality of life is more than recreation, culture, clean air and low crime
  - ◆ Opportunities for the two career household
    - Children's education leading to best opportunities
    - Housing/income equilibrium
    - Convenient commute
    - Welcoming to diversity – global recruiting and transfers

Are some of your technology professionals at risk?

Vulnerable to entrepreneurial energy elsewhere?

# Locational Issues and Factors

## How Much Space Do You Need?

- Areas that may cause a variation in cost/SF
  - ◆ Lab to office ratio
  - ◆ Floor to floor height
  - ◆ Floor space efficiency
  - ◆ Lab finishes and case work
  - ◆ Mechanical area & system redundancies
  - ◆ Soil conditions and effect on foundation design
  - ◆ The rental cost – profile
  - ◆ Space allocation depends upon cost per square foot



# Locational Issues and Factors

## How Much Space Do You Need?

Normally the base rent number is on a NNN basis meaning the NNN number is only for Base building work including:

- Site improvements
- Building envelope
- Roofing
- Base building common areas
- Base building : HVAC, plumbing, electrical, telecommunication
- Security

# Locational Issues and Factors

## Rental Cost Profile

Base building cost:

- Site acquisition
- Total hard cost
- Total soft cost
- Leasing commission/consulting fees
- Legal
- Finances

# Locational Issues and Factors

## Rental Cost Profile

Base building cost:

Size:	90,000 square foot warehouse facility	\$34.00 NNN
Operating/ Tax expense:		\$12.00
Tenant improvements:	(\$100.00 per SF@14%)	<u>\$14.00</u>
		\$61.00

**INCENTIVES ARE NEEDED**

# Facility and Infrastructure Requirements



# Critical Attributes: Bay Size & Floor Plate Size

1. Key Dimensions – Core Corridor to Exterior:

25' = Min. Lab Depth

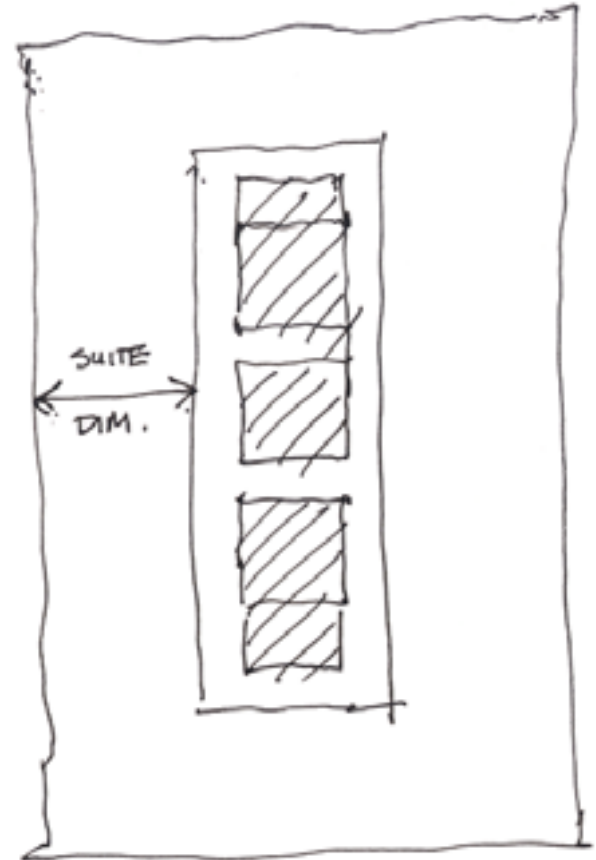
35' = Min. Lab Depth and Layer of Offices

>40' = Mix of Lab Support Office Space as Suites

2. Effective Floor Plate Sizes:

~ 30,000 GSF for Multi-Tenant Occupancies

< 20,000 GSF – Small Occupancies or Single Tenant Occupancies



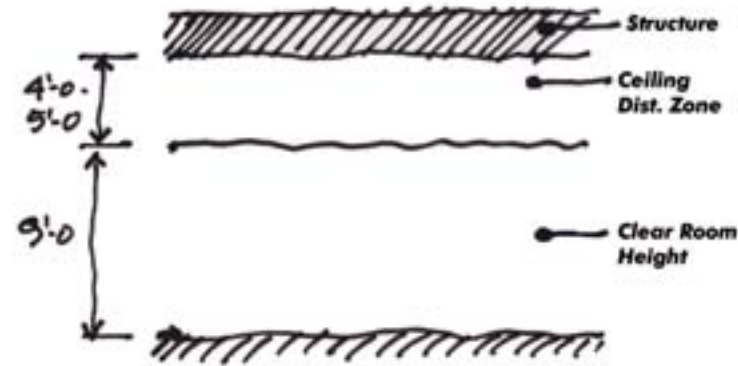
# Critical Capabilities: Floor-to-Floor Height

## 1. Basic Height Requirements:

9' – 0 Ceiling Height

4'-0 – 5'-0 From Ceiling to Underside of Structure

13'-0 – 14'-0 plus Depth of Structure = Floor-to-Floor Height



## 2. Floor to Floor Heights Range from:

16' – 17' - Optimal for New Construction

14' – 15' - Manageable with Soffiting and Use of Beam Pockets

13'-6 + Lower - Below Minimum. Requires Mix of Vertical Distribution, Short Duct Runs, On-Floor Mechanical Rooms.

**Both Adaptable  
for Horizontal  
Duct Distribution.**

## Critical Capabilities: LIVE Load Capacity

1. Optimal for Research  $\sim$  100 lbs/SF – 125 lbs/SF
2. Alternative Approach - Local upgrades; develop specific heavy loading zones.
3. Superstructure Rigidity for Vibration.

# Critical Attributes: HVAC & Infrastructure

## 1. Basic Issue

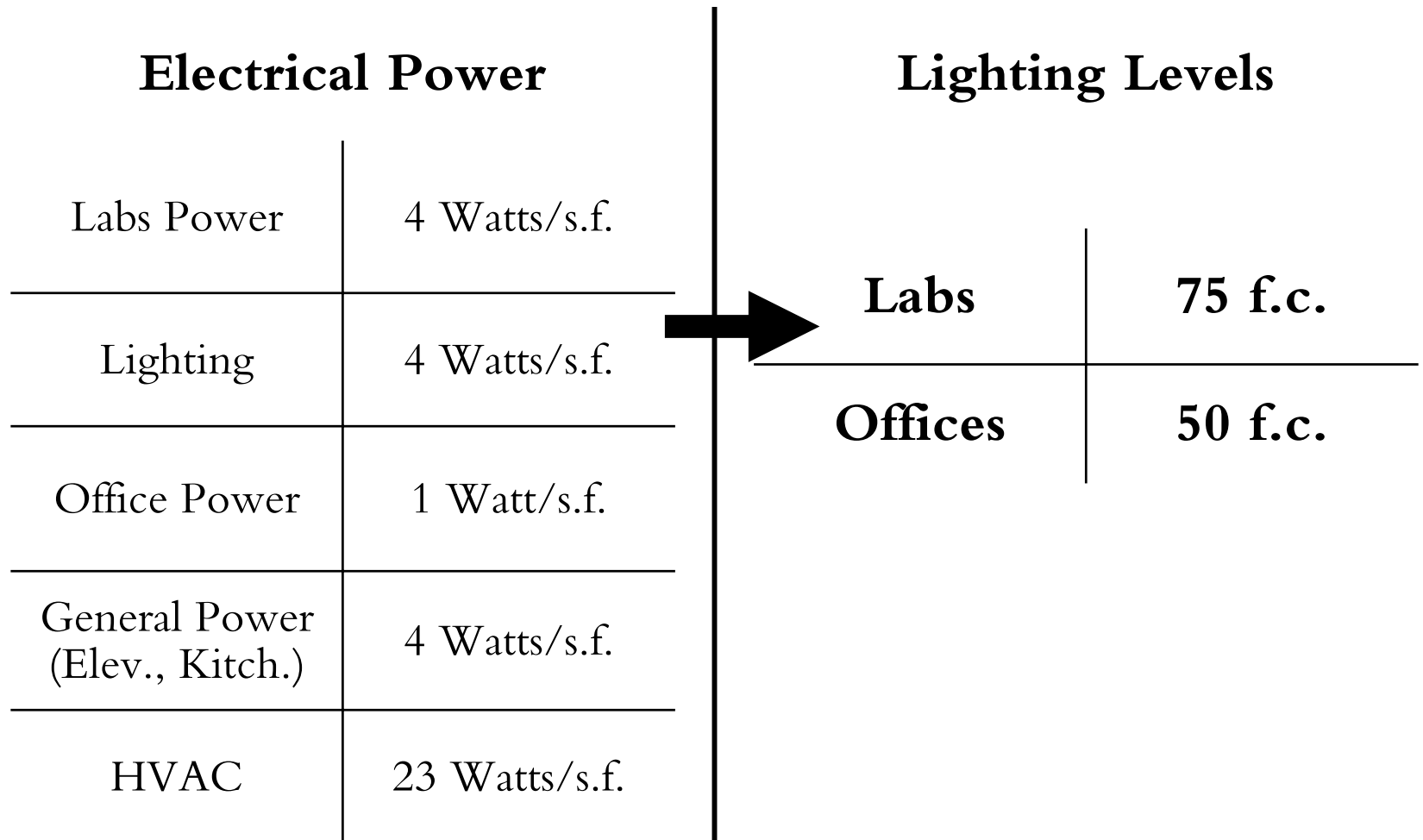
- Research facilities require 2X the infrastructure of office buildings.

## 2. HVAC for Research

- 2.0 cfm – 2.5 cfm for Labs
- 3.0 cfm for Vivariums
- Year-round cooling and chilled water
- Fume hoods, equipment exhaust and heat load, pressurization control, odor control, and redundancy are the main drivers of HVAC capacity.
- HVAC distribution is sensitive to floor-to-floor height.
- Real Estate required for Air Handlers, Exhaust Fans, Chillers, Cooling Towers – rooftop, basement or on-the-floor.



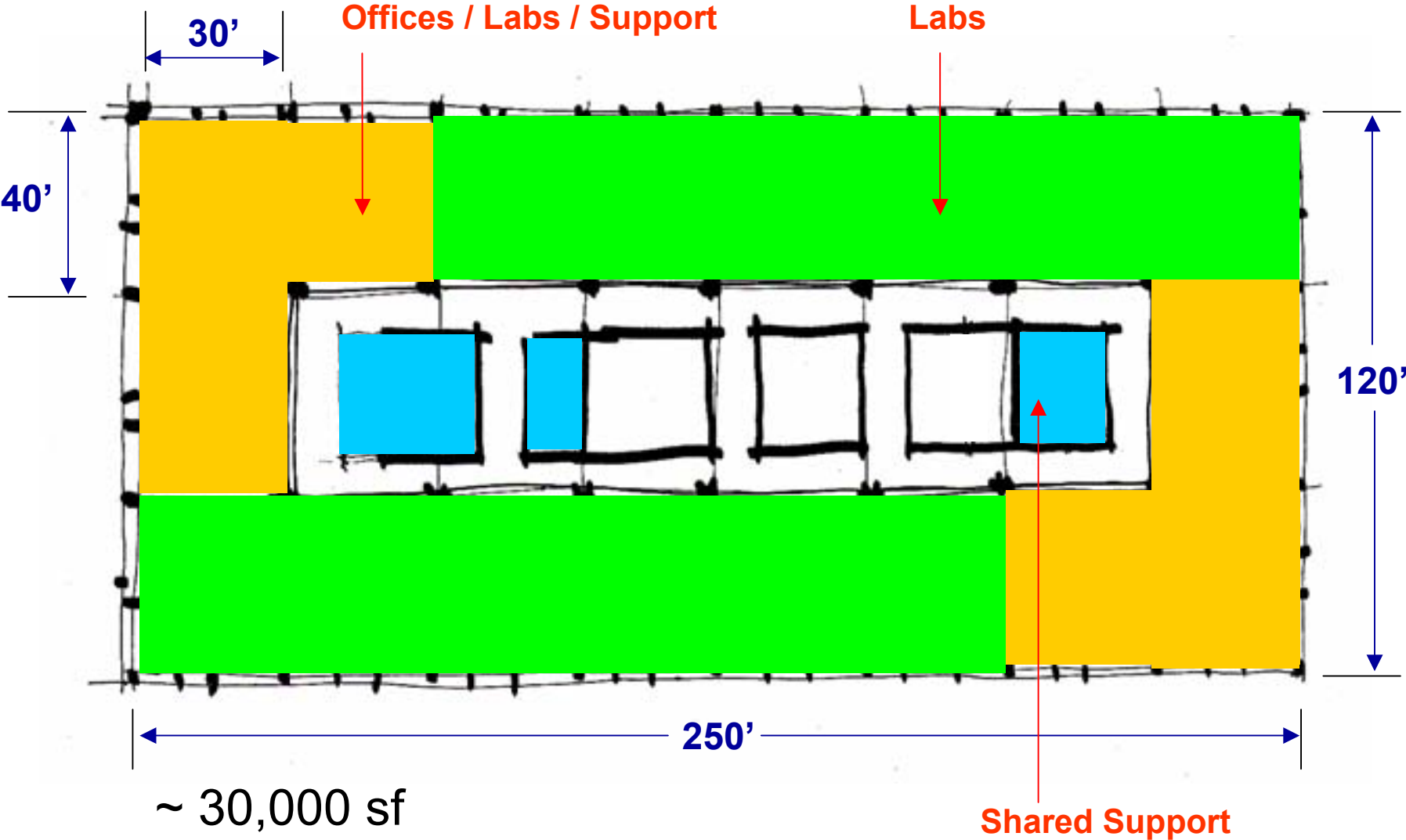
# Electrical Systems Criteria



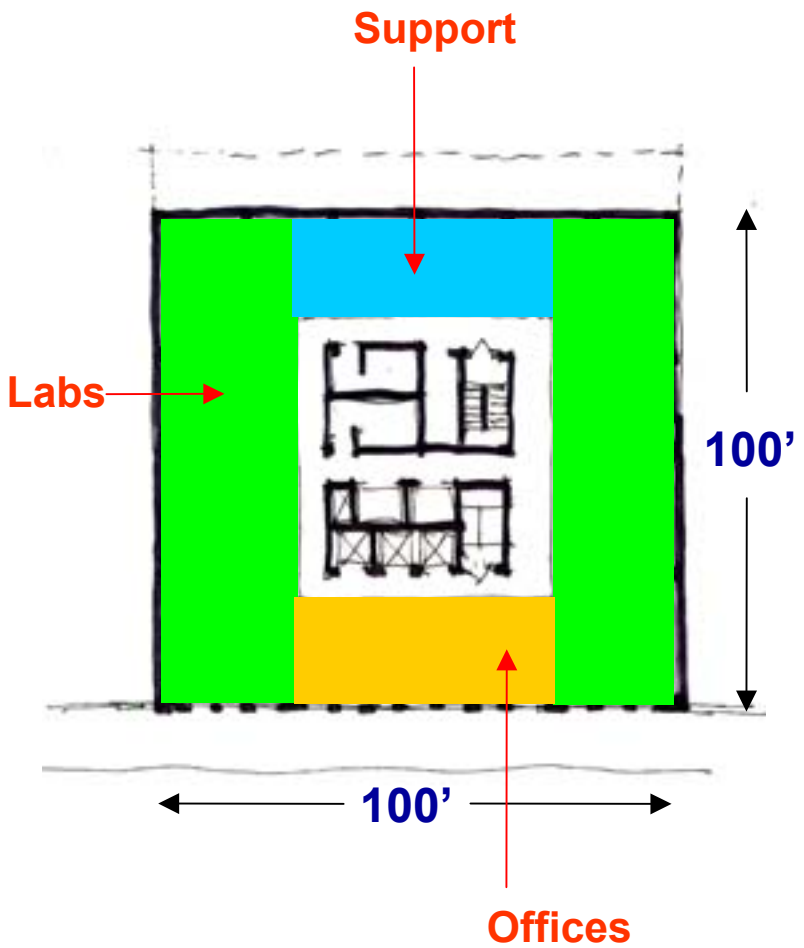
# Plumbing Systems

<b>Water Usage Rates</b>	Labs	50 gpd/person
	Offices	25 gpd/person
<b>Piped Services</b>	Gas Outlets	5-10 cfh
	Vacuum Outlets	0.5 scf/m @15" hg
	Compressed	1cfm @ 50 psi

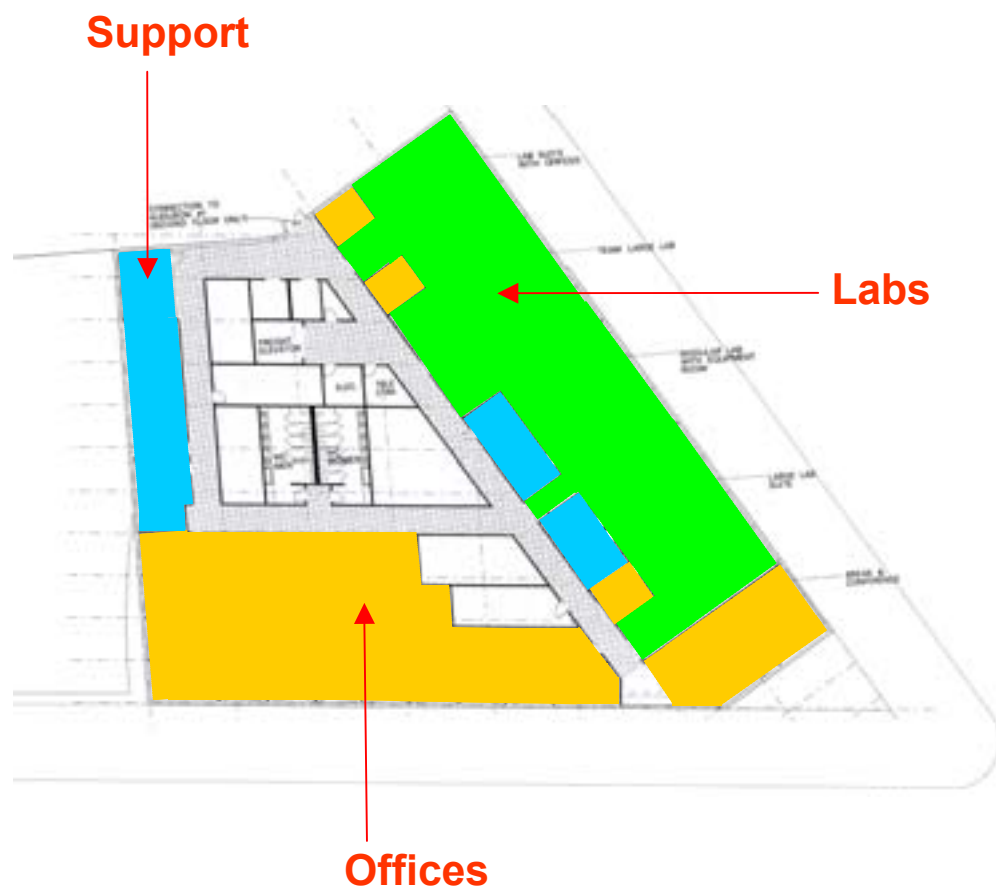
# The Optimal Floor Plate Model



# Floor Plate Models: The Urban Reality



~ 10,000 sf



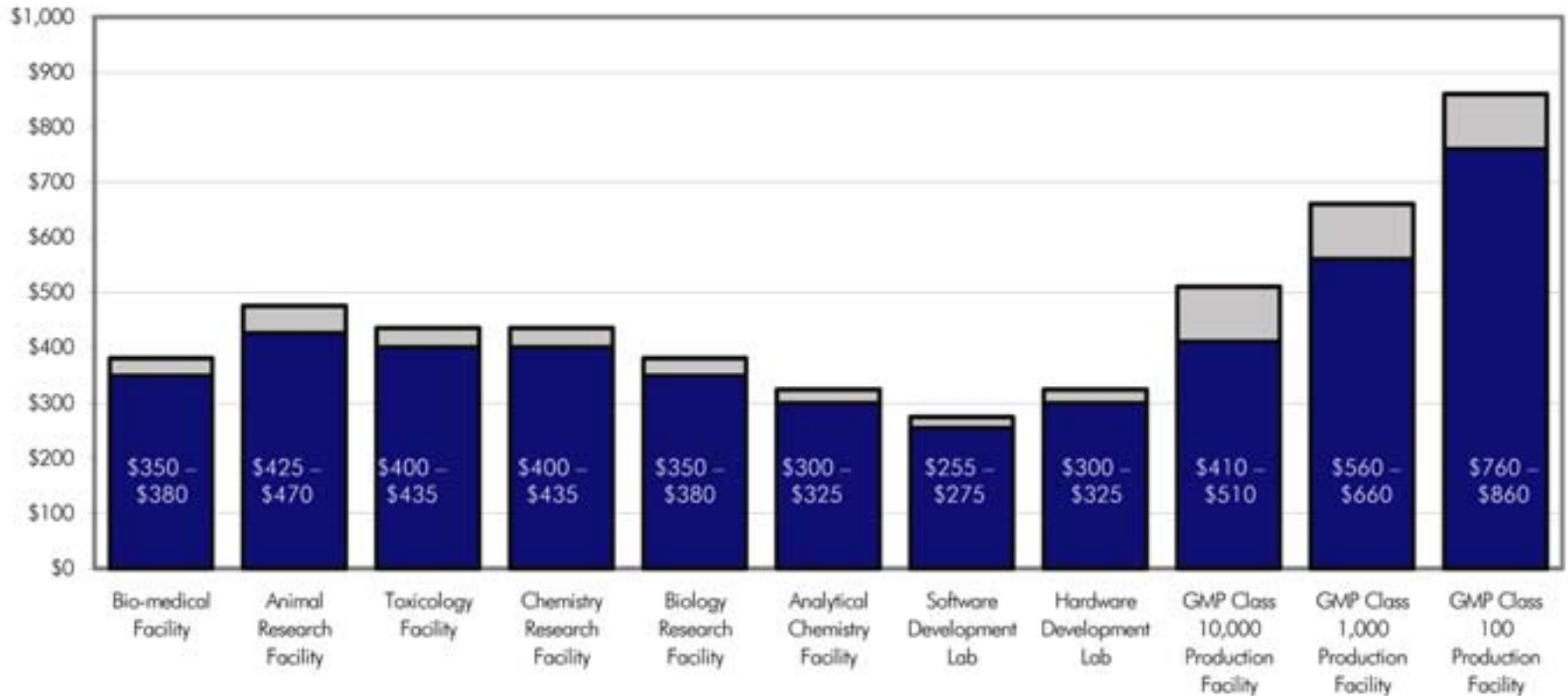
~ 18,000 sf

# Floor Plate Models: The Suburban Reality



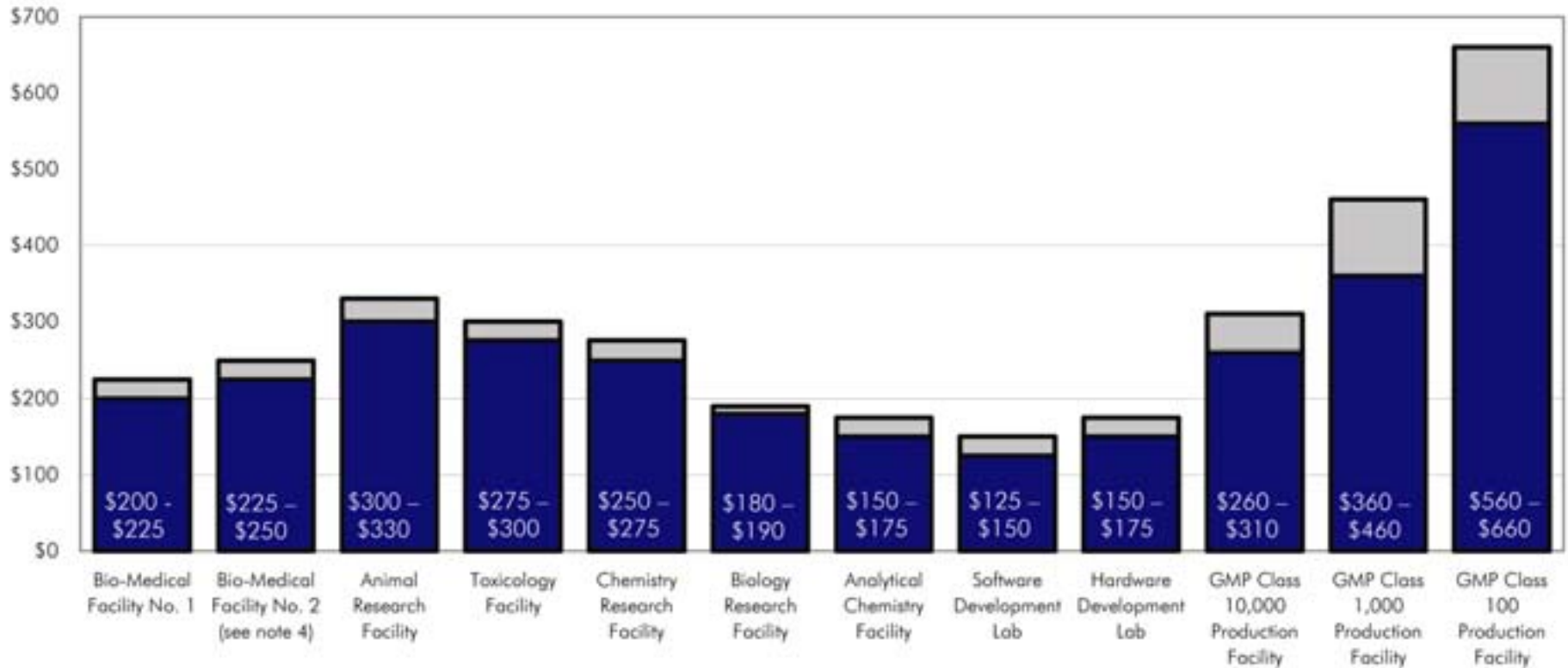
# New Construction

## 2003 Construction Cost Index



# Renovation

## 2003 Construction Cost Index



# Give Me a Break

What Biotech Companies Need from Government



## Available Pool of Incentives in New York State

- Biotechnology Industry Growth Fund
- Biotechnology Investment Refundable Tax Credit
- Qualified Emerging Technology Employment Credit
- Qualified Emerging Technology Company Capital Tax Credit
- Biotechnology Capital Access Program

# The Debate – Are More Incentives Really Required?

- Corporate Welfare or Job Creation?
- Cost Benefit Analysis Required
- Centers of Excellence

## Next Steps

- New Incentives geared to the one constant for biotech companies – **real estate**
- Lack of affordable space, primarily in centrally located areas (e.g., NYC)
- Biotech Redevelopment Program (“BRP”)
  - New investment by owners in existing buildings would result in real estate tax savings
  - Net savings would allow capital investments and tenant improvements needed to attract biotech tenants at competitive rents
  - Zoning text amendment to expand areas where biotech occupancies can be located as of right

## **Panel Chair and Speakers:**

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