



Office of Facilities Coordination
Texas A&M University

Public Health-Related Institutions Space Projection Model

**Overview of the Components and Methodologies Used to Determine
Space Requirements**

*As developed by the Texas Higher Education Coordinating Board
Fall 2000*



Health-Related 5-Factor Model

- **Initially Approved by the THECB in 1992**
- **Reviewed & Updated in 2000**
- **The model predicts the net assignable area of E&G space an institution needs in five categories:**
 - 1. Teaching**
 - 2. Research**
 - 3. Office**
 - 4. Clinical**
 - 5. Support**
- **Auxiliary spaces are excluded.**



Health-Related 5-Factor Model

Uses:

- **New Construction Request**
- **Funding**
 - Infrastructure Funding Formulas



Health-Related 5-Factor Model

- **Classrooms**
- **Class Labs**
- **Special Class Labs**
- **Demonstration**
- **Audio/Visual Rooms**
- **Exhibition**
- **Lounge/Meeting Rooms**
- **Locker Rooms**
- **Assembly**



Health-Related 5-Factor Model

- **Calculation of Space need**
 - Multiplication of Headcount in each Level/Category by the square footage shown:

Type of Student	Undergraduate	Grad/Residents	Post Doctoral	Fellow/Trainee
Medical	120	30	30	30
Dental	120	120	30	30
Public Health	75	75	30	30
Biomedical Science	65	55	30	30
Nursing	75	75	30	30
Allied Health	75	75	30	30
Pharmacy	65	55	30	30



Health-Related 5-Factor Model

- **Space Types:**
 - Research Lab & Laboratory Service Rooms
 - Animal Quarters & Animal Service Rooms
- **Calculation based on the Greater of:**
 1. 9,000 sqft for every \$1.223761 million* in Research Expenditures
 - Average of Last 3 years' expenditures
 2. Faculty FTE x 250 square feet

*Consumer Price Index inflation factor reflected in the variable since 1992.



Health-Related 5-Factor Model

- **Space Types:**
 - Offices, Conference Rooms
 - Associated Service Areas
 - **Calculation based on**
 1. 1,600 sqft for each \$1.223761 million in E&G Expenditures.
 2. Personnel
 - Faculty FTE as reported in the CBM-005
 - Non-Faculty = Faculty FTE x Faculty:Staff Ratio in LAR
- Space Needs
- 190 Sqft x Faculty FTE
 - 170 Sqft x Non-Faculty FTE

If Calculation 1 is Greater than Calc 2 then Calc 1 used
If Calc 2 is Greater than Calc 1, then 1& 2 are Averaged



Health-Related 5-Factor Model

- **Room Types:**
 - Patient Rooms & Baths, Nurses Station
 - Surgery, Health Care Treatment, Service Labs
 - Health Care Supply, Health Care Public Waiting
- **Calculation:**
 - A Formula was not developed
 - Because of the diversity of arrangements for providing clinical space,
 - The predicted space will be the same as the institution's actual space.



Health-Related 5-Factor Model

- **Space Types:**
 - Data Processing/Computer Rooms
 - Shops, Storage, Vehicle Storage
 - Associated Service Areas
- **Calculation based on the sum of:**
 1. **Library Space:** 50,000 square feet
 2. **9% of the Sum** of Predicted Space from:
 - Teaching
 - Research
 - Clinical
 - Office



Health-Related 5-Factor Model

- **Provides additional space for coordination of programs* operated in multiple locations**
- **Calculation**
 - 100 percent of the first 10,000 E&G Space at the remote campus.
 - 25 percent of all E&G Space in excess of the first 10,000 square feet.

*Legislatively authorized instructional programs



TAMUS Infrastructure Funding

Factor	Academic	Health-Related	Service Agencies	
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Teaching	X	X	X	
Library	X		X	X
Research	X	X		X
Office	X	X	X	X
Support	X	X	X	X
Clinical		X		
Multiple Campus Adjustment		X		

¹Texas Cooperative Extension (formerly TAES)



Health-Related 5-Factor Model

	Actual	Predicted	Surplus or (Deficit)
Teaching	84,469	105,905	(21,436)
Research	137,602	63,955	73,647
Office	121,972	131,586	(9,614)
Clinical	48,494	48,494	0
Support	67,660	81,495	(13,835)
Sub-Total	460,197	431,435	28,762
Multi-Campus Adjustment		45,408	
Approved E&G Projects	75,263		
Total	535,460	476,843	58,617



Health-Related 5-Factor Model

Institution/Agency	Predicted	Actual	Surplus/ Deficit
Texas A&M University	5,023,404	4,757,136	(266,268)
<u>TAMUS Agencies</u>			
Tx Engineering Exp Station	603,092	424,118	(178,974)
Tx Engineering Ext Service	166,868	213,898	47,030
Tx Transportation Institute	247,280	176,702	(70,578)
Tx Agricultural Exp Station	833,457	744,196	(89,261)
Tx Agricultural Ext Service	122,829	151,134	28,305
Tx Vet Med Diagnostic Lab	19,450	33,135	13,685
Tx Forest Service	6,732	11,078	4,346
TAMUS Health Science Center	476,843	535,460	58,617



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