

**THE PROJECT**

Northeastern University engaged a team of consultants headed by NBBJ to develop a campus master plan. Our role in this endeavor was to create a space planning model that was designed to assist in the master planning process. The model was designed to enable the University to test "what if" scenarios at three different scales: university, college and individual department.

**CHALLENGE**

One challenge was to make the model simple and easy to use, yet have it sufficiently detailed and data specific. Another challenge was to tie the model to the University's desire to hire 150 new, research oriented faculty and replace an equal number of faculty through retirement. In addition, 315 faculty will also be replaced by the time campus plan reaches the end of the planning timeframe.

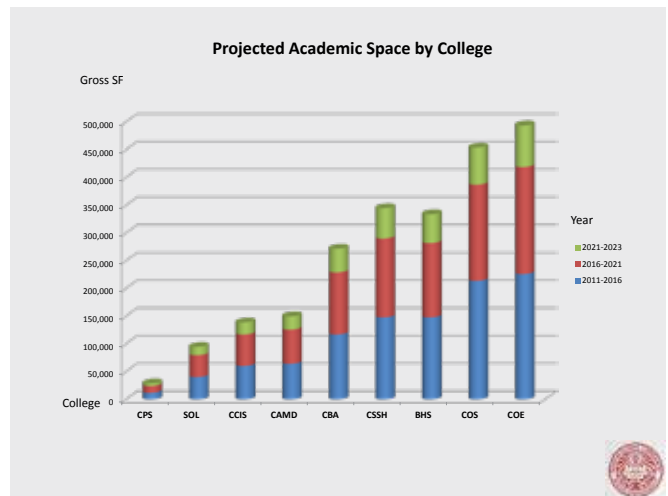
**SOLUTION**

An excel workbook was created with a model for each of the colleges and schools. Variables included the number of undergraduates, graduates, PhDs. and postdocs. Variables also included the number of tenure and tenure track faculty, instructors, adjuncts, visitors, and research faculty. On the academic administrative side, we also incorporated the number of department chairs, professional staff, clerical staff, technicians, and student workers.

As part of the definition of space needed for instruction we incorporated the number of weekly student contact hours, average section size, and utilization standards as well as space standards. Office space and research space were similar in terms of the detail requested.

In the end, though, if the University wanted to know the space implications of changing the student faculty ratio, changing several numbers shows the impact. If the university wants to see the implications of increasing the number of PhD students in a college or across the campus, it is easy to do so.

The space model was used throughout the campus planning process.



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