

# PART ONE

## EXECUTIVE SUMMARY

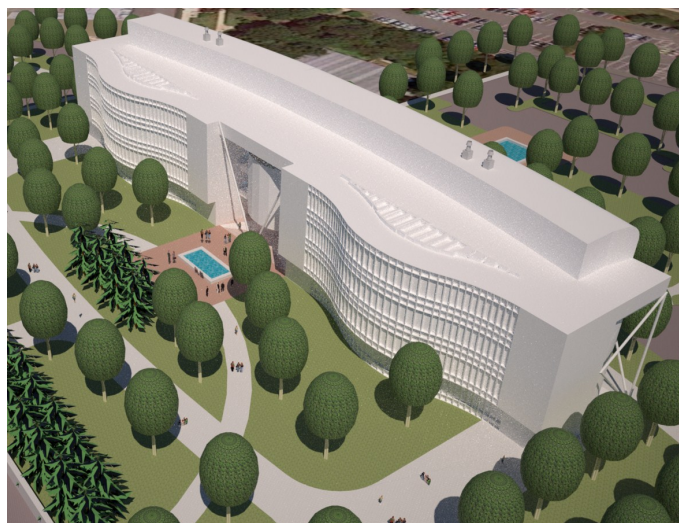
### Purpose of Study

This Feasibility Study is for a newly proposed School of Engineering (SoE) building intended to be the first phase of construction of a new engineering complex that would gradually replace the function of the SoE's primary facility constructed in 1961. It is envisioned that the 1961 structure will eventually be demolished. The new Sustainable Systems Engineering Building (SSEB) that is to be the first phase is to be sited in the context of a flexibly planned future build-out for the SoE campus.

It is envisioned that the new facility will become a focal point on the Busch campus to create a destination for the Rutgers community, corporate partners and its neighbors at large.

### Conceptual Planning

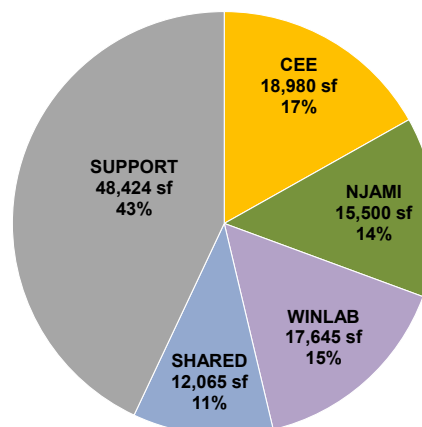
As a gateway to the School of Engineering, this 112,500 square foot interdisciplinary facility will support the School's three major research thrusts: *sustainability* that will drive programmatic advancements in Civil and Environmental Engineering, *wireless communication technologies* that are the focus for research efforts by faculty in Electrical and Computer Engineering and an associated center, WINLAB, and *advanced manufacturing* research that will capitalize on the strengths and industry ties of Chemical and Biochemical, Mechanical and Aerospace, and Industrial and Systems Engineering. Making its home in the SSE building, the New Jersey Advanced Manufacturing Institute will develop engineering innovations in the field of manufacturing and support opportunities to increase regional and national public/private technology partnerships.



A key component to the program resides in the "Shared Facilities". All the spaces listed here are designed to encourage collaborations within the housed programs as well as the entire SoE. The Common Area will provide a space that will be energetic, celebratory and visible. The design should capture the attention of student and faculty to draw human energy into the facility in a way a flagship building should.

### Program

CIVIL ENVIRONMENTAL ENGINEERING	18,980 SF
NEW JERSEY ADVANCED MANUFACTURING INSTITUTE	15,500 SF
WIRELESS INFORMATION NETWORK	17,645 SF
SHARED SPACES	12,065 SF
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TOTAL NSF	64,190 SF
TOTAL GSF	112,614 SF



PROGRAM DISTRIBUTION

45% of this project is dedicated to research space in support of the SoE mission.