I1.03 Capacity Planning

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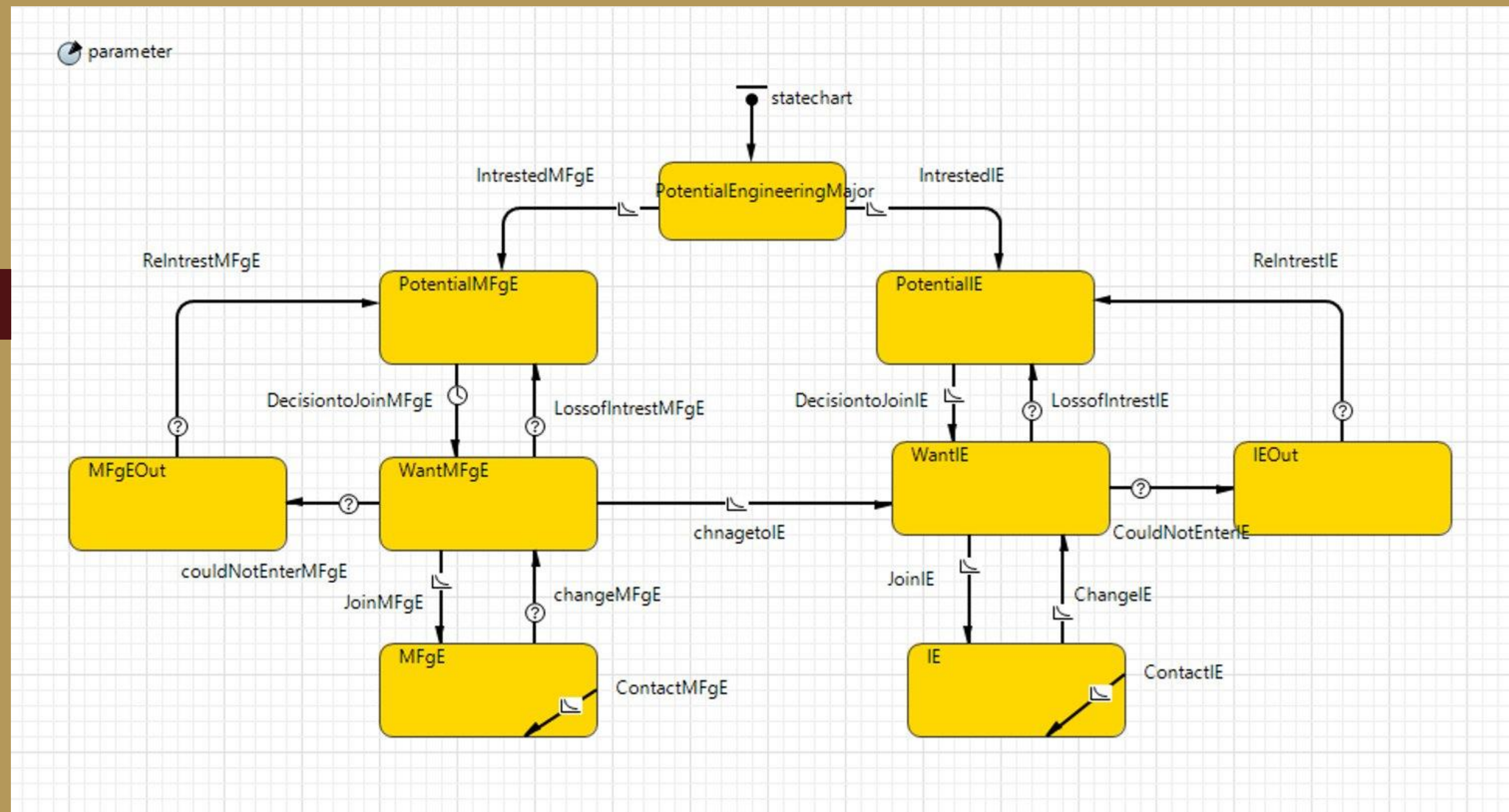**TEXAS STATE INGRAM SCHOOL OF ENGINEERING**

anylogic

Problem Statement

- The School of Engineering is growing.
- Resources are being strained.

Objectives

- Effectively model day to day operations using AnyLogic.
- Ensure that resources are being allocated efficiently. (Professors, classrooms, class sections, etc.)
- Optimize student to faculty ratio.

System State Chart

Projected Incoming Students

Define: Create a simulation that can accurately depict the School of Engineering.

Measure: Students coming in, students going out, transfers, drop outs, etc. Data collection.

Analyze: Utilize AnyLogic simulation software to effectively optimize the student-to-faculty ratio..

Improve: Seek improvements based on simulation accuracy

Control: Implementation of 2 phases.

Phase I – Unconstrained Resources

Phase II – Constrained Resources

Deliverables

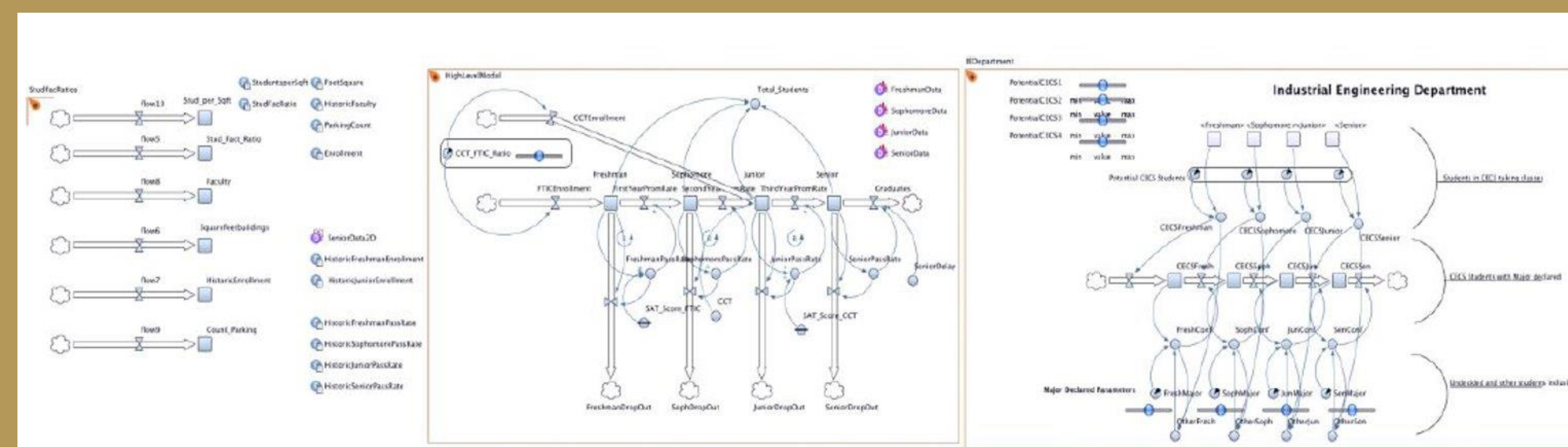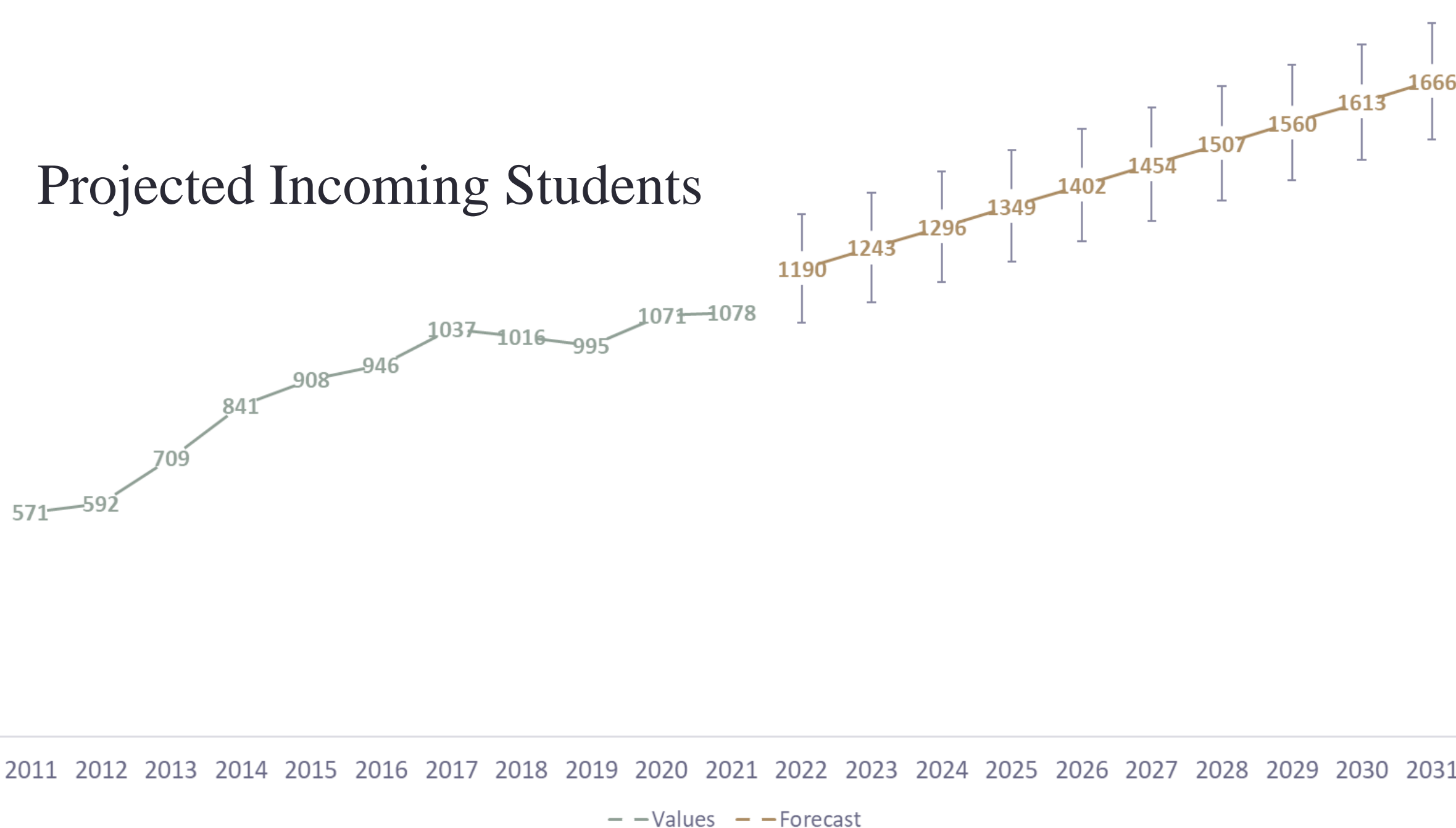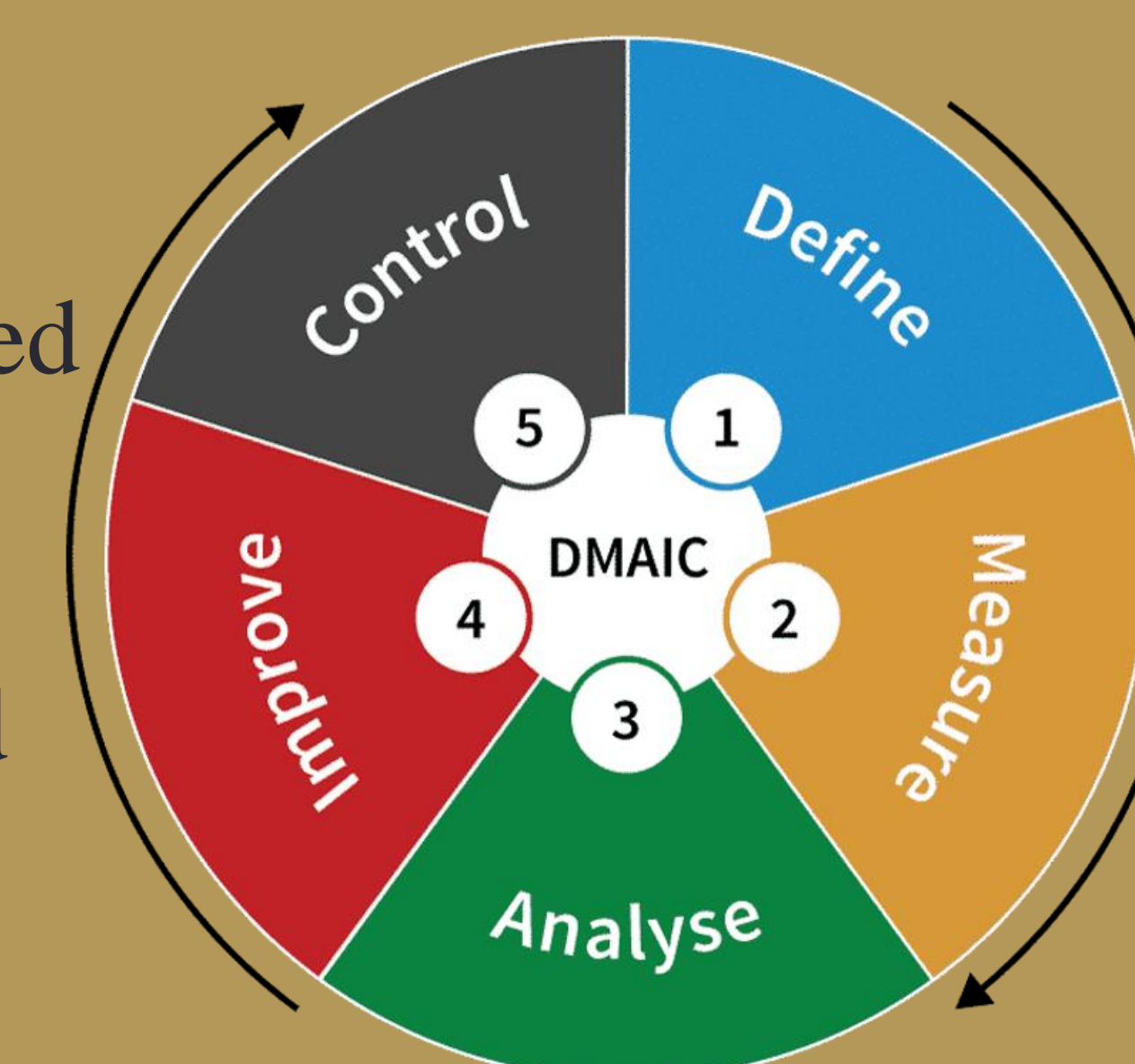- Deliver a fully functioning, accurate, and reliable simulation.

Human Factors

- Promote the health, comfort, and safety of each individual.
- Minimize the risk of design.

Design Team

(L – R) Billy, Alec, Noe, Salam