

AIRPORT TERMINAL EXPANSION - EASTERN UNITED STATES

PAUL YINGLING AE SENIOR THESIS 2009



Executive Summary

This portion of the thesis project identifies areas of analyses to be discussed in the final thesis presentation followed by a brief description of the breadth topics. The analysis portion of the paper defines the problem, or opportunity, supported by the background research that has already been completed. Preliminary investigation has shown that the topics are relative to: critical industry issues, value engineering, and sustainable design.

Analyses that will be proposed in this paper are as follows:

- Interdisciplinary Document Coordination – This is a preconstruction activity that reviews the drawings, as well as, the specifications to locate errors or omissions in an attempt to reduce the amount of RFI's during the construction phase.
- Panelized Construction – This section proposes replacing the stick build façade in the attempt to save time and money on the project.
- Pedestrian Rerouting – Pedestrian rerouting is a common concern, in this instance pedestrians were routed over a temporary elevated corridor that ran directly through the site. Concern for safety and the schedule the proposed elimination of this bridge is evaluated.
- Alternative Glazing – Due to current energy demands, an alternative glazing or dual-façade may be a realistic solution for both cost and end user satisfaction (sound reduction).

The breadth studies will utilize the above analyses and be limited to structural and mechanical. A weight matrix located in Appendix B breaks the analyses into four categories: research, value engineering, constructability review, and schedule reduction. Finally, a timetable is provided for the organization of which the proposed assignment will be completed.