



EXECUTIVE SUMMARY & BREADTHS

The proposed thesis for Shaare Tefila Congregation includes a project background description, four separate areas of research and analysis, a weight matrix, and an expected outcome summary. Analysis I is a research of the Spanish-English language barrier. Analysis II is a study on the acoustics of the worship space. Analysis III is a life cycle study of the renewable energy systems. Analysis IV investigates prefabrication delivery. Further detail on the proposal sections include:

Project Background

This section describes some details about Shaare Tefila, for the purpose of better acquainting the reader before going in depth on research topics. Project background includes information on the function of the building, site description, and interesting features.

Analysis I: Spanish-English Language Barrier in Construction

This section investigates the spanish-english language barrier as a problem with several innovative solutions. Research will focus on construction professionals, construction workers of varying experience levels, construction management students, and architectural engineering professors.

Analysis II: Worship Space Acoustical Analysis

This section investigates the sound quality in the worship space of Shaare Tefila Congregation. Different finish materials, as well as music systems will be analyzed for optimum affect. Research will focus mainly on value engineering. This analysis will also serve as an *acoustical engineering breadth #1*.

Analysis III: Renewable Energy System Life Cycle Analysis

This section analyzes the life cycle cost associated with the building's renewable energy systems, including geothermal wells. Research will focus on specifically on value engineering and constructability. This will also serve as a *mechanical breadth #2*.

Analysis IV: Prefabrication Delivery Analysis

This section analyzes the benefits of applying prefabrication to the project's construction. Research for this investigation will focus on constructability and schedule acceleration.

Weight Matrix

This section consists of a table matrix, breaking down the thesis work into sections and assigning percentages of emphasis out of 100%. The emphasis sections are: critical industry knowledge, value engineering, constructability, and schedule acceleration.

Expected Outcome Summary

This section basically serves to summarize the proposal topics and research methods. This will include any additional notes as well as goals.