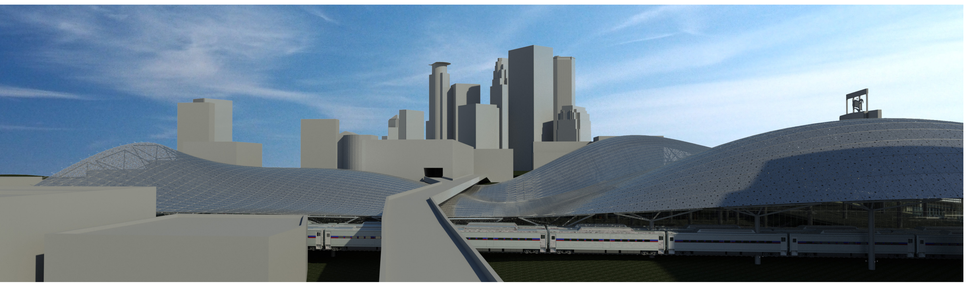
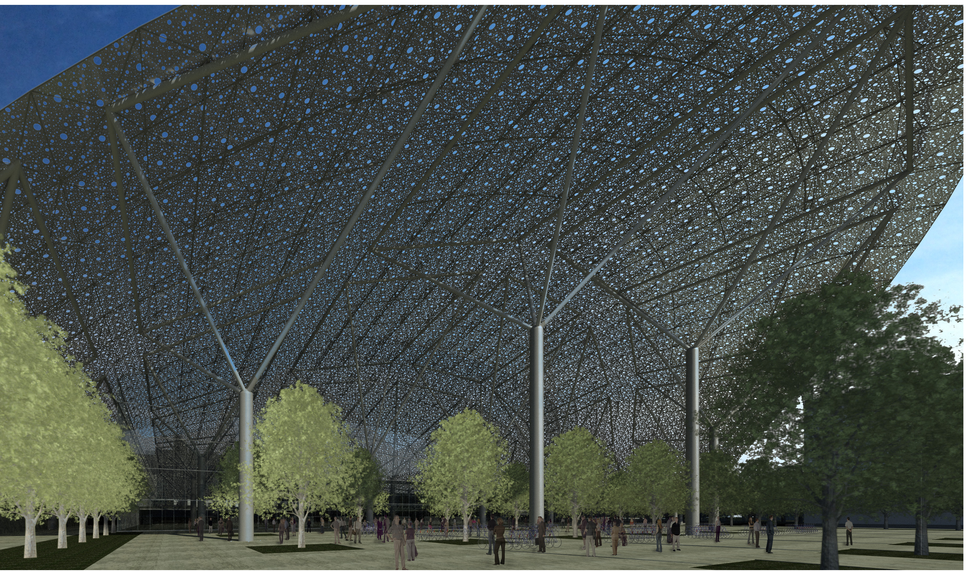
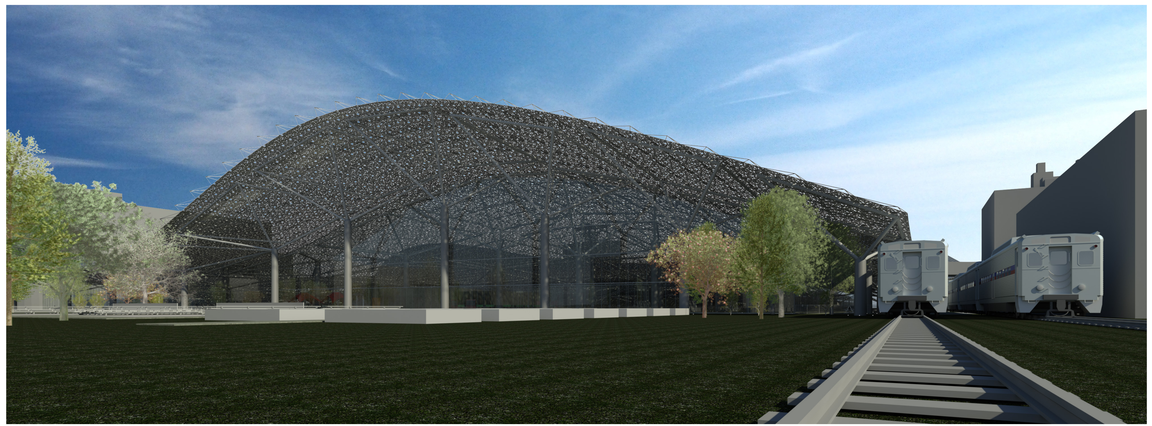
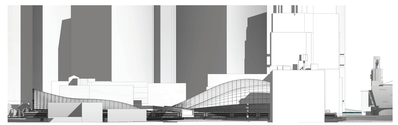
MINNEAPOLIS TRANSPORTATION TERMINAL







SOUTH ELEVATION



NORTH ELEVATION

WEST ELEVATION

EAST ELEVATION

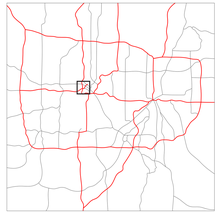
THEORETICAL PREMISE:
THE PURPOSE OF THIS THESIS IS TO EXAMINE THE WAY THAT ALL THE DIFFERENT MODES OF TRANSPORT IN AN URBAN TRANSPORTATION SYSTEM CAN BE BROUGHT TOGETHER INTO ONE SEAMLESS SOLUTION.

INFORMATION:
THIS THESIS IS SET IN THE METROPOLITAN AREA OF THE TWIN CITIES, MINNEAPOLIS/ST. PAUL. LINKING TRAIN, LIGHT RAIL, BUS, AUTOMOTIVE AND PEDESTRIAN TRAFFIC WILL SET MINNEAPOLIS/ST. PAUL APART FROM OTHER METROS AND PROVIDE A WAY FOR ITS CITIZENS TO MOVE QUICKLY AND EFFICIENTLY AROUND THE URBAN AREA.

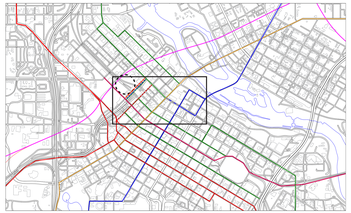
THE TWIN CITIES HAVE ALWAYS BEEN ON THE CUTTING EDGE OF DIFFERENT TRANSPORTATION TYPES. IN THE PAST, MUCH OF THE TWIN CITIES, MINNEAPOLIS & ST. PAUL WERE INTERCONNECTED BY STREETCAR SYSTEMS, AUTOMOBILE HIGHWAYS AND ROADS, AND A LARGE BUS SYSTEM. WITH THE ADDITION OF THE LIGHT RAIL IN THE TWIN CITIES METROPOLITAN AREA IN THE LAST FEW YEARS, THE NECESSITY FOR AN URBAN TRANSPORTATION TERMINAL HAS INCREASED. WITH THE PROPOSED TWIN CITIES TRANSPORTATION TERMINAL, AUTOMOBILE TRAFFIC, BUS TRAFFIC, LIGHT RAIL, AND FOOT TRAFFIC WILL ALL HAVE A CENTRALIZED LOCATION TO MEET AND FACILITATE QUICK AND EFFICIENT TRANSFER BETWEEN DIFFERENT MODES OF TRANSPORTATION.

WITH THE SITE BEING IN CLOSE PROXIMITY TO THE MAIN HEART OF COMMERCIAL BUSINESS OF DOWNTOWN MINNEAPOLIS, NEXT TO TARGET FIELD, AND A BLOCK AWAY FROM TARGET CENTER, IT IS IN A PRIME LOCATION FOR A TRANSPORTATION TERMINAL. PEOPLE COMING IN TO THE AREA FOR WORK OR PLEASURE, WILL BOTH BE ABLE TO BENEFIT FROM THIS PROPOSED SOLUTION.

MINNESOTA



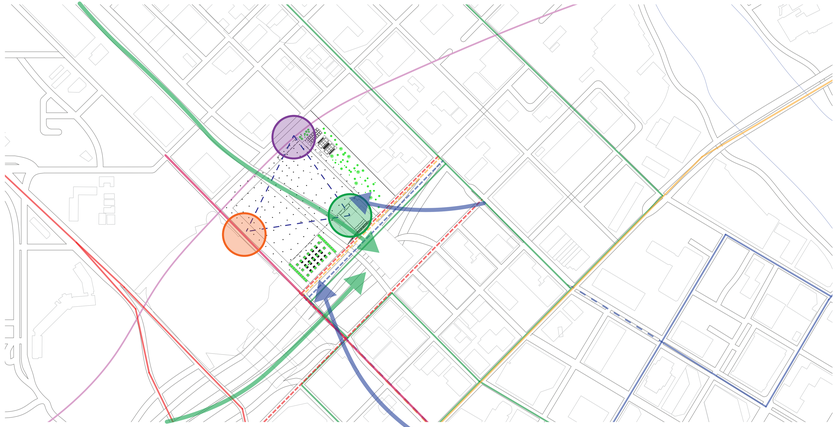
TWIN CITIES METRO AREA - MAIN ROADWAYS SHOWN



DOWNTOWN MINNEAPOLIS WITH BUS LINES, LIGHT RAIL AND TRAIN LINES IN COLOR

- BUS LINES: 4, 6, 12, 61
- BUS LINES: 3, 7, 14,16, 50, 94
- BUS LINES: 10, 11, 17, 18, 25
- BUS LINES: 5, 9, 19, 22
- LIGHT RAIL LINES: BLUE AND GREEN
- COMMUTER TRAIN LINE

-ALL PROPOSED ADDITIONS TO BUS LINES SHOWN AS A DASHED LINE



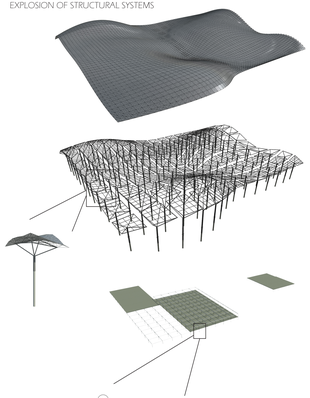
SITE PLAN: DOWNTOWN MINNEAPOLIS, COMMUTER TRANSPORTATION SYSTEMS SHOWN IN COLOR

- BUS/AUTO TERMINAL
- LIGHT RAIL TERMINAL
- TRAIN TERMINAL
- PEDESTRIAN TRAVEL TO SITE (WITH ARROW)
- AUTO TRAVEL TO SITE (WITH ARROW)

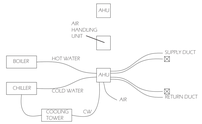
THE SITE ALLOWS FOR TRAFFIC COMING IN FROM I-394 WEST AND I-94 SOUTH ENTERING INTO THE CITY, TO UTILIZE THE PROPOSED TRANSPORTATION TERMINAL FROM ENTERING THROUGH THE EXISTING PARKING STRUCTURE LOCATED ON THE SOUTH SIDE OF THE BUILDING. PEDESTRIAN TRAFFIC WILL ENTER THROUGH THE SOUTHEAST AND SOUTHWEST CORNERS OF THE BUILDING ALLOWING ACCESS FROM THE DOWNTOWN SKYWAY SYSTEM AND FROM DIFFERENT ENTERTAINMENT VENUES AROUND THIS AREA. TRAIN TRAFFIC ENTERS THE BUILDING FROM THE NORTH PORTION, COMING FROM THE NORTHSTAR COMMUTER RAIL. THE LIGHT RAIL TRAFFIC WILL ENTER FROM THE EAST SIDE OF THE BUILDING ON THE SECOND FLOOR.

AFTER ANALYZING THE MOVEMENT OF THE COMMUTERS WHO WOULD BE USING THE TERMINAL, THE BASIC SHAPE THAT WAS CREATED FROM THEIR PATHS OF TRAVEL, WAS A BASIC TRIANGLE.

EXPLOSION OF STRUCTURAL SYSTEMS



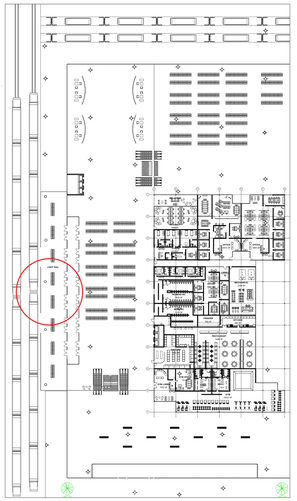
DETAIL OF INTERIOR STRUCTURAL SYSTEM



SIMPLIFIED MECHANICAL DIAGRAM

GROUND LEVEL FLOOR PLAN

THE RED CIRCLES INDICATE THE MAIN TRANSIT TERMINALS WITHIN THE OVERALL BUILDING. THE BLUE LINE INDICATES THE CIRCULATION OF THE PATRONS OF THE SPACE.



SECOND LEVEL FLOOR PLAN

LATITUDINAL SECTION PERSPECTIVE

LONGITUDINAL SECTION PERSPECTIVE

TWIN CITIES TRANSPORTATION TERMINAL
ARCH 772 DESIGN THESIS
LOGAN DIEHL
GANAPATHY MAHALINGAM
REVIT, AUTOCAD, ADOBE CREATIVE SUITE, SKETCHUP, RHINO, FORM Z, FUZOR, OCULUS RIFT