JOSHUA WEISS

PLANNER

OVERVIEW

Mr. Weiss offers a variety of experience in geospatial science, environmental planning, urban and regional planning, Geographic Information Systems (GIS) and 3D visual simulations.

GEOGRAPHIC INFORMATION SYSTEMS (GIS)
Mr. Weiss has extensive expertise utilizing geographic information systems (GIS) and 3D visual simulations. His experience includes conducting GIS studies for environmental impact analyses, environmental justice evaluations, permit applications and visual impact assessments. Mr. Weiss has a working knowledge in the use of mapping grade global positioning systems (GPS) and has integrated data from GPS into GIS databases, including wetland delineations and inventories of historic properties and structures. Mr. Weiss also has experience in the field of remote sensing and land use coverages. He is familiar with ArcGIS spatial analyst extensions as well as the use of model builder to optimize productivity.

EDUCATION

- B.A. Geography, 2008
- ESRI Certificate of Completion for ArcGIS 3D Analyst 2008

PROFESSIONAL AFFILIATIONS

- Connecticut GIS Users Group (CTGIS)
- Northeast ARC Users

YEARS EXPERIENCE

- 2 Years with firm
- 2 Years in industry

PROJECT EXPERIENCE

NEW ENGLAND HIGH SPEED RAIL CORRIDOR | CONNECTICUT DOT | 2010
Mr. Weiss participated in collecting data as well as performing analysis of potential impacts along the Amtrak rail corridors in Connecticut, Massachusetts, Vermont, and to Montreal (Canada). Mr. Weiss obtained and identified potential noise sensitive receptors and evaluated impacts due to train and train horn noise. Using GIS analysis, he also identified potential impacts to wetlands, floodplains, and historic properties from proposed track infrastructure. Mr. Weiss closely coordinated with the analysis team, supplying information for the Programmatic EIS within a three-month timeframe.

PENN STATION EAST SIDE ACCESS RAILROAD SIMULATION MODELING | NEW YORK, NY | 2010-2011
Mr. Weiss was an analyst trained to create a database of track information essential for running complex railroad simulation models. The work focused on railroad infrastructure leading into and out of Penn Station in Manhattan, New York. Mr. Weiss created the database for the East Side Access area leading from Long Island Sound into Penn Station and Grand Central Station through the Harold Interlocking. Mr. Weiss reviewed the proposed new track plans, created and retrieved necessary data from the drawings, and created an organized table in the required format for the simulation modeler software. The data was used for a comprehensive rail simulation of the stops, starts, tracks used, and arrival/departure times of trains from Amtrak, Metro North, and LIRR on potential new alignments.

TRAFFIC INTERSECTION INVENTORY | MERIDEN, CT | 2010
Mr. Weiss served as a field inspector to inventory traffic features at key intersections across the city of Meriden, CT. Mr. Weiss identified traffic signal operations, took field measurements of existing features, and made recommendations for improvements on existing infrastructure.

GREATER BRIDGEPORT TRANSIT AUTHORITY MAINTENANCE GARAGE| BRIDGEPORT, CT | 2009-2011
Mr. Weiss provided GIS analysis, presentation maps, and field data collection for a potential new site plan for an existing bus maintenance facility. Mr. Weiss's roles included identifying noise-sensitive receptors, creating graphics to illustrate the features on and around the site, and identifying potential environmental and community impacts which could arise from modifications to the facility. Mr. Weiss also performed field measurements of ambient noise in the vicinity of the site.

ROUTES 6 & 25 ACCESS MANAGEMENT PLAN | NEWTOWN, CT | 2009-2010
Mr. Weiss assisted in evaluating a range of aspects associated with improving access to and from driveways, business entrances, and streets along Route 25 and Route 6 in Newtown, CT. Mr. Weiss provided the team with the geographic information needed to evaluate access management options and created a customized symbology to graphically illustrate the location of recommended improvements. The final graphics conveyed the complex improvement concepts in an easy-to-read format essential to the success of the project.

ROUTE 7 TRANSPORTATION AND LAND USE PLAN | SOUTHWESTERN CT | 2009-ONGOING
Mr. Weiss was the primary GIS analyst supporting the evaluation of transportation and land use opportunities in this 17 mile corridor along State Route 7. Responsibilities included mapping roadways and land use and identifying features which would constrain or enhance transportation improvements. Mr. Weiss's analysis provided insights needed to recommended improvement designs and methods to best serve the corridor and achieve the project's goals. Mr. Weiss's analytical skills and ability to display multiple data sets in an understandable way added accuracy and efficiency to the project team as a whole.

ROUTE 8 INTERCHANGE CORRIDOR STUDY | SEYMOUR, CT TO WATERBURY, CT | 2009-2010
The Route 8 interchange study in Connecticut focused on enhancing traffic flows on Route 8 as it winds through the Naugatuck River Valley and ensuring compatibility with the towns in which the interchanges are located. Mr. Weiss performed analysis of the corridor relating to natural and community resources from Seymour north to the I-84/Rte8 interchange in Waterbury. Mr. Weiss created land use and zoning maps using data from a variety of public sources. He created multi-resource figures portraying resources such as historic buildings and hazardous waste sites in order to assess potential impacts from interchange alternatives. Mr. Weiss integrated CADD data of the alternatives into GIS to create an accurate representation of potential impacts on resources from the proposed interchange reconfigurations.

INTERSTATE 81 CORRIDOR STUDY | ONONDAGA COUNTY, NY | 2010-ONGOING
The Interstate 81 (I-81) corridor study in Onondaga County NY examined alternatives to improve travel conditions on and near the raised I-81 viaduct located in downtown Syracuse NY. Mr. Weiss identified and mapped a variety of elements in the study corridor using GIS, including community resources, natural resources, and infrastructure elements. He used GIS screening to identify resources potentially impacted by improvements and designed the layout of project graphics.

WASTEWATER IMPROVEMENT PLAN | GRANBY, MA | 2009-2011
For this study of possible improvements related to septic disposal practices, Mr. Weiss was a primary planner involved in collecting and mapping parcel-level septic data for the town of Granby, Massachusetts. Based on a variety of soils, water resources, and housing density by lot size data, Mr. Weiss created graphics that displayed areas in town with the greatest need for wastewater improvements. Mr. Weiss designed graphics for technical analysis purposes as well as for public informational meetings. The results will aid the town in prioritizing public expenditures for wastewater facilities.

MDC CLEAN WATER PROJECT | HARTFORD, CT | 2010-ONGOING
The MDC Clean water project is a comprehensive program of sewer system improvements, involving many in-street construction areas throughout the city of Hartford CT. Mr. Weiss has been on-call to continuously update a public website illustrating the real-time locations of construction activities where local travel could be delayed.

The website displays a map with symbols indicating the type of activity and duration to help commuters plan their trips into the greater Hartford area. His work has included adjusting the pertinent details on a daily basis, to portray the construction locations, construction duration, and the traffic patterns associated with each construction site. Mr. Weiss has been responsive on a moment's notice from the project team to maintain this much-needed website.

DANBURY BRANCH ELECTRIFICATION | WESTERN CT | 2008-ONGOING
Mr. Weiss served as GIS analyst and planner for documenting existing conditions and impacts for a Draft Environmental Impact Statement (DEIS.) Mr. Weiss created working maps and finished graphics for water resources, water quality, community resources, historic resources, archaeological resources, threatened and endangered species, habitats, wetlands, and floodplains. Each set of graphics included 14 sheets to cover the entire 40-mile long study corridor. Mr. Weiss integrated the CADD engineering design concepts into GIS and performed quantitative analysis of footprint impacts to natural and cultural resources for each of the build alternatives. He also assisted in the qualitative assessment of project impacts to wetlands and habitats through cross-examination of multiple data layers.

STATEWIDE BICYCLE AND PEDESTRIAN PLAN | CONNECTICUT DOT | 2008-ONGOING
Mr. Weiss was responsible for designing and creating a new Connecticut Department of Transportation state bike route map to replace the former version. Mr. Weiss worked in concert with other planners to produce a bicycle suitability data set, utilizing the following Connecticut Department of Transportation data: shoulder distance; lane width; and vehicle speeds. The mapping included designated cross-state routes and multiuse trails across the state. The carefully constructed data will accurately provide bicyclists with the information needed to plan a ride along the most bicycle-suited state routes.

HIGH SPEED RAIL CORRIDOR STUDY | NEW HAVEN, CT TO SPRINGFIELD, MA | 2008-ONGOING
Mr. Weiss was the primary GIS analyst assisting impact analysis for potential rail improvements within this 60-mile long corridor. He provided detailed graphics and data to other team members throughout the duration of the project. Utilizing the FRA and FTA General Noise and Vibration Assessment guidelines, Mr. Weiss identified noise-sensitive and vibration-sensitive receptors along the proposed alignment. Then applying GIS analysis Mr. Weiss determined the number of sensitive resources potentially impacted by project improvements within the specified screening distances.

NEW BRITAIN-HARTFORD BUSWAY | NEW BRITAIN, NEWINGTON, WEST HARTFORD AND HARTFORD, CT | 2008-ONGOING
Mr. Weiss served as GIS analyst and Field Technician to support environmental permitting and wetland mitigation tasks during the design of a 9-mile long dedicated rapid bus transit facility between New Britain and Hartford CT. Mr. Weiss provided GIS analysis of wetland types, wildlife habitats, and tree locations to help document impacts from the busway construction. Mr. Weiss took bi-weekly field measurements of groundwater levels at the proposed wetland mitigation site, to help assess the sufficiency of hydrology for the mitigation plan. At the same time, he recorded field observations of environmental conditions on the site and tracked the amount of precipitation for use in determining the sustainability of a new wetland at the site.

ADDITIONAL PROJECT EXPERIENCE

- Hampton Roads Light Rail Study, VA (2009-Ongoing)
- Region 2000, (2009-2010)
- Norwalk Bicycle and Pedestrian Plan, CT (2010-Ongoing)
- SCRCOG Shoreline Greenway, CT (2009-2010)
- Ellington Airport Accusation Feasibility Study, CT (2009-2010)