Texas State (San Marcos) Campus Map Visualization, c. 1900-2015 Project

Client Progress Report

Submitted By



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Filed: October 28, 2015

Table of Contents

**1.0 Introduction** 1

1.1 Summary 1

**2.0 Background** 1

2.1 Purpose 1

2.2 Scope 2

**3.0 Tasks** 2

3.1 Work Completed 2

3.2 Present Work 3

3.3 Work Scheduled 3

**4.0 Problems** 4

**5.0 Conclusion** 4

# **1.0 Introduction**

Progress on the Texas State (San Marcos) Campus Map Visualization, c. 1900-2015 Project has been progressing at a steady pace since our proposal was accepted by Texas State University Archives on September 28th, 2015. The purpose of this document is to provide our client with an update as to our overall progress, outline our future goals, and detail any issues we have encountered since our previous meeting in September.

## 1.1 Summary

In September 2015, N*motion* GIS contracted with the Texas State University Archives to document how the campus of Texas State University has changed since its inception in 1899. This report acts as an update on the progress of the project and outlines the status the tasks completed to date, ongoing work, and projected goals. Overall, work is progressing on schedule and is projected to be completed on time.

# **2.0 Background**

The Texas State University Archives teamed with the Geography department to create a Request for Proposal (RFP) as part of the course work for GEO 4427. The main goal of the project would be to take previously collected data and use it to present a historic study of the university from c. 1900 to 2015 through the use of spatial data, historic photographs, and other archival information.

## 2.1 Purpose

As of late-2015, there has been no formal projects aimed at documenting the history of the university through spatial data. As part of the original proposal N*motion* GIS will create a series of map products that document the spatial changes to Texas State University's campus from c. 1900 to 2015.  The result of this study will be presented, in part, through the use of a time based mapping video, online web mapping tools, and formal reporting.

## 2.2 Scope

The project is focused on Texas State University’s main campus in San Marcos. In addition to the spatial scope of the project, there is a temporal component focused on documenting the changes to the campus from c. 1899 to 2015.

# **3.0 Tasks**

The vast majority of the raw data associated with the project has been previously compiled by the Facilities Office of Texas State University. This data included shapefiles of the campus boundary and building outlines by decade as well as 20 gigabytes of historic photographs and reports detailing the history of the university. As part of this project there are four major tasks to be completed.

* Task 1 - Data mining of data provided by Texas State University Archives and facilities offices
* Task 2 - Produce a video showing the changes to campus through the use of ArcGIS’ time slider function
* Task 3 - Produce a web map that allows users to choose different eras of Texas State University’s development spatially with interactive pop ups of pictures and historical facts and perform statistical analysis of the relationship between campus size and student population.
* Task 4 - Final deliverables, reporting/analysis, spatial data, and poster presentation

## 3.1 Work Completed

Work completed to date has centered on Task 1 and 2, namely data mining and completion of a draft video. N*Motion* GIS initially focused our efforts on becoming acquainted with the large dataset provided to us. We then transitioned into extracting construction and demolition dates for every building within the provided dataset. Where possible, we attempted to identify the exact construction and demolition date of a building by using the data provided to N*Motion* GIS as well by reaching out to external data repositories such as the Texas Historical Commission (THC).

Task 1’s data mining activities were completed by October 21st, 2015 and work quickly transitioned into Task 2, the production of a draft video. The video dynamically showed the changes to Texas State University’s campus through the use of ArcGIS’ time slider function.

## 3.2 Present Work

Currently work is focused on the design phase of the web map for Task 3. N*Motion* GIS has chosen to use ESRI’s Story Map website to design and implement the web map. Story Map was selected because of its simple development functions that will allow us to utilize coded web templates as well as its support for embedded photographs. Story Maps is specifically designed to tell a story through maps, which is exactly the goal of this project. We project that work on Task 3 will be completed by the last week of November.

## 3.3 Work Scheduled

Towards the middle of November, N*Motion* GIS will begin to focus on Task 4, the compilation of our final deliverables. These deliverables will include a video showing the following:

* Geodatabase of all spatial data used in the project
* Web map that allows users to choose different eras of Texas State University’s development spatially with interactive pop ups of pictures and historical facts.
* Written Final Report outlining the project.
* Poster that shows final maps and showcases Texas State University’s expansion.
* Analyze Population/Land Acquisition
* Final Presentation to be given in class by N*motion* GIS

# **4.0 Problems**

Through the course of Task 1 and 2 we’ve encountered a few minor roadblocks, mostly related to the data. We had three issues that are as follows:

* Unable to track down the exact construction or demolition dates of some of the buildings
* Some buildings in attribute table did not have attribute information and we were unable to identify them. Therefore, we were only able to provide a general date of construction or demolition
* Historic maps of camps in the provided dataset are not georeferenced making it more difficult to track down information

# **5.0 Conclusion**

While we have had some minor issues with the data, most in terms of incomplete or inaccurate datasets our project is on track and moving forward swiftly. Based on our current rate of progress, we anticipate meeting our final deliverable date of December 2nd, 2015 and do not need to revise our previous timeline or budget.  It is our hope that the results of this project will be utilized by academics conducting research on Texas State University as well by students interested in the rich history of the university. Additionally, the resulting datasets can be incorporated into the facilities office’s planning tools, allowing them to assess the impact new construction might have on historic portions of the campus.