

TEMPLATE FOR CMap PROJECT

**Project Title: Fast Food Locations in Brigham City, Utah**

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**Box Elder High School**

**Class: Box Elder, July 2008**

Project Description	Serve Box Elder High School to see how to get to the fast food establishments in the community of Brigham City. Map the results on a map using GPS and GIS to show distance and time it takes to get to each place. It could be hyperlinked to the menus offered at each establishment.
Community Issue or Problem Selected -How project evolved?	To help the community and high school students to reach the fast food places in a timing manner to facilitate returning to the school during the allotted time for lunch. Alternative routes could be shown on the map.
Community Partner(s)	The different fast food establishments. Box Elder School District, Box Elder School Student Council, Principal, Teachers, School Board
Project Objectives	Collect data from the fast food places. Use GPS units to collect waypoints and tracks Input data into ESRI, ArcGIS, and create map. Analyze maps to show alternate routes by mapping the result of the students tracking.
Utah Core Standards/Objectives	Students will understand the community in spatial terms. Students will understand the human and physical characteristics of places. Students will understand how human activities shape the earth's surface. Students will use geographic knowledge to connect to today's world.
Essential Question(s) -Spatial Issue	Location of the fast food establishment in relationship to the school. Identify volume and routes used to get to the fast food places. Hyperlink to the menus of each establishment.
Assessments (rubrics, scoring guides)	Assessment based upon: data collection, mapping, analysis, and a final presentation.

Project Products	Students will make a complete data set, map based on the data and a presentation.
Project Timeline (include a step by step Procedures)	2 days of GPS training Use GIS training as part of a week long mapping unit. Homework during this time will be getting the data with GPS, menus from the fast food establishments. Take up to 2 weeks.
Resources Needed	GPS units Computer lab with ESRI ArcView 9.2 with data sets PowerPoint/ Projector Clip boards
Skills Required	Students will need to be able to collect data, be able to read maps, use GPS and GIS map making skills, be able to give a presentation
Project Team Member Roles	<b>Teacher(s):</b> set up the criteria, and guidance. <b>Students:</b> collect data, create map and presentation. <b>Partner(s):</b> provide data, provide opportunity for student presentation.
Celebration/Presentation	Celebrate and present each step of the process, data collection, and completion of the map and presentation of final product.
Project Evaluation	Student survey and fast food establishment surveys Faculty survey to see if it improves the tardy issue.
Project Bibliography	Survey sources ESRI Data GPS Waypoints and Tracks Local Resources that are used.
Plans for Future CMAP Activities	Make a brochure to hand out to the students. Show time involved of driving there.

Optional:

- Lesson Plans
- Student Artifacts
- Publicity