

## CMaP PROJECT

**Project Title: Bike/Walk Trails**

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**Class:** St. George 2010

Project Description	<ul style="list-style-type: none"><li>• Students will analyze portions of St. George bike/hike trails to determine if trash cans and dog poop bags maintenance are necessary.</li><li>• Students will use GPS, GIS, and collect data to locate, mark and map these specific concerns mentioned above utilizing Arcmap.</li><li>• The final product/portfolio will be presented to the City of St. George Parks Department.</li><li>• The final product/portfolio will be presented to Heritage Elementary in an assembly.</li><li>• The students will understand the value of service and the impact it can have on their own community by participating in the bike/walk trails service project.</li></ul>
Community Issue or Problem Selected -How project evolved?	St. George has been creating wonderful biking and walking trails throughout the city that are used regularly. The trails are connected throughout the city creating heavy foot and bike traffic. Due to weather conditions and human use there are locations where trash collects and dogs poop creating a need for trash receptacles.

Community Partner(s)	City of St. George, St. George residents, Heritage Elementary 4 <sup>th</sup> Grade students, Heritage Elementary Staff, Parent volunteers
Project Objectives	To inform the City of St. George of areas of concern regarding litter and animal waste on specific areas of the biking/walking trails in town.
Utah Core Standards/Objectives	<p>Health Education – 4<sup>th</sup> Grade</p> <p>Standard 7 The students will understand the value of service and effective consumer practices.</p> <p><b>Objective 1</b> Participate in <b>service-learning</b> that benefits Utah. (SS)</p> <ul style="list-style-type: none"> <li>a. Identify needs of Utah and/or its citizens.</li> <li>b. Examine situations when people or groups assist Utah.</li> <li>c. Plan, implement, and report on service benefiting Utah.</li> </ul>
Essential Question(s) -Spatial Issue	<p>How can Fourth Graders in St. George identify, examine, plan, implement, and report on a specific learning service that will benefit their own community in Utah?</p> <p>Where on the bike/walk trails should students investigate?</p> <p>What time of the year and for how long should the study take?</p> <p>Will the students be able to make the connection that local service will benefit the state of Utah?</p>
Assessments (rubrics, scoring guides)	
Project Products	<ul style="list-style-type: none"> <li>• A student generated data portfolio to be presented to the city as a proposal</li> <li>• Data map</li> <li>• A scrapbook to reflect upon and to inspire others to perform service that will benefit Utah.</li> </ul>

<p>Project Timeline (include a step by step Procedures)</p>	<ol style="list-style-type: none"> <li>1. Obtain bike/walk maps for City of St. George</li> <li>2. Modify maps for record keeping.</li> <li>3. Create data collection spreadsheets to accompany GPS marks as found.</li> <li>4. Students will walk assigned portions of the paths with a GPS and data log to collect information.</li> <li>5. Students will photograph areas to accompany data collected.</li> <li>6. Students will analyze the data collected to determine specific needs for areas of the St. George City Trails.</li> <li>7. Students will create a data map.</li> <li>8. Students will create a portfolio that is a compilation of the data collected.</li> <li>9. Students will make a presentation to the City of St. George.</li> <li>10. Students will make a presentation to the students at Heritage Elementary.</li> </ol>
<p>Resources Needed</p>	<ul style="list-style-type: none"> <li>• GPS units for each group</li> <li>• A digital camera for each group</li> <li>• A data collection chart and clipboard with pencil</li> <li>• A City of St. George Trail Map</li> <li>• A computer to transfer and effectively log all data to be analyzed</li> <li>• GIS mapping software</li> <li>• Parent volunteers</li> </ul>
<p>Skills Required</p>	<ul style="list-style-type: none"> <li>• Knowledge of GPS device</li> <li>• Basic computer software skills</li> </ul>
<p>Project Team Member Roles</p>	<p>Teacher(s):Mrs. van den Eikhof</p> <p>Students: Fourth Grade Students</p> <p>Partner(s): City of St. George</p>
<p>Celebration/Presentation</p>	<ul style="list-style-type: none"> <li>• Have a class pizza party.</li> <li>• Present to the City of St. George at a city council meeting.</li> <li>• Present to all students at Heritage Elementary in an assembly.</li> <li>• Have an article published in the PTA newsletter.</li> <li>• Have an article published in The Spectrum.</li> </ul>

Project Evaluation	<ul style="list-style-type: none"><li>• Fieldwork – data collection, GPS marks</li><li>• Portfolio – compilation of data onto ARC map</li><li>• Presentation – City of St. George and Heritage Elementary School</li></ul>
Project Bibliography	n/a
Plans for Future CMAP Activities	I plan on collecting data on the bike/walking trails to assess tree roots that have caused cracks in the path and/or tree branches that are overhanging into the path. These two factors can greatly increase the safety of the path for users.