Final Project

Scenario:

Assume that for one day you need to carpool with the other members of the group in order to get to all of the locations you each identified on the day you visited the most different locations. Determine the shortest route in terms of miles and then determine the shortest route in terms of time. Are these the same? Why or why not? What other conditions might you want to consider? (Your data may give you some ideas.)

You will need to use a map in order to calculate the distances. The data you collected has the times.
Your presentation can be given as a poster, a PowerPoint, a video or other pre-approved product.

Your presentation should include:

1. The names of people in your group
2. A picture (graph) representing all the locations with all roads between them labeled with mileages and times
3. A detailed plan of your solution
4. A written explanation of the strategies you used to find the shortest route
    - The solution on the graph and the total number of miles
5. A written explanation of the strategies you used to find the least amount of time
    - The solution on the graph and the total time
6. Why the shortest routes are the same or why not
7. Other conditions you might want to consider and what data gave you the idea

Final Project Sample Rubric

Group Members Names:

_____ _____

_____ _____

Do you have?	Points Possible	Yes	No	Points Earned
Detailed Plans				
Overall plan to solve the problem (explanation of strategies)	10			
Data collected about potential routes	20			
Other parts of your project:				
Graph labeled with locations and mileage	10			
Graph labeled with times	5			
Solution labeled on graph	15			
Total mileage and total time	10			
Other conditions to consider	10			
Presentation				
All group members participate	5			
Present all parts of the project	10			
Answer questions from audience	5			
TOTAL:	100			