I. Categories, Teams, and Content

1. Ideally each poster should address the theme given for that year's competition. The poster may include statistical or mathematical information, but it does not need to include both.

2. Each poster must have a high school or middle school faculty sponsor. For students who are home-schooled, a parent may serve as the sponsor. A sponsor is an adult responsible for the student who is also present for the competition.

3. Each poster must be related to mathematics or statistics, and be suitable for public display in the eyes of the contest organizers.

4. There will be three competition categories. Category I: 6th, 7th, and 8th grades. Category II: 9th and 10th grades. Category III: 11th and 12th grades.

5. Students may work as a team if they choose. A team should consist of no more than three students, and every team member should be in the same Category.

6. An entry form (online) for each team must be submitted at least a week before the competition. (Late submissions may be accepted! Please contact the organizers as soon as possible.)

7. To enter, either visit the UTC Mathematics Department web page, and enter through the form provided there, or compose an email to Lucas-vanderMerwe@utc.edu with the subject “UTC Math Poster Competition 2015”. The body of the email should contain the following information:
   - First and last name(s) of entrant(s)
   - School, county, and state
   - Category (I, II, or III)

II. Presentation Guidelines

1. Posters will be displayed in the Tennessee Room and Chattanooga Room of the University Center on the UTC campus on Thursday 26 March 2015 from 9:00AM until 12:00PM. Signs will be posted directing students and observers to the specific locations.
2. Posters will be placed on a table, must fit in an area which is four feet wide by 2.5 feet deep, and must be able to stand erect by themselves or with the aid of a stand supplied by the authors of the poster. (Stands are not available from the organizers of the contest.)

3. A label must be placed on the back of the poster which gives the poster title and authors’ names, grades, school, and sponsor. The label should be at least the size of a 3” x 5” index card.

4. Credit must be given on the poster for any outside assistance. A list of sources should be included.

5. While physical models and laptops may be a part of the exhibit, they cannot be the only part.

6. All material must be accessible without having to lift or turn pages.

7. All materials should be placed within the assigned display area.

8. The display area will open at 8:30AM on Thursday 26 March 2015 for poster setup.

9. The poster should be dismantled within one hour after the end of the competition.

10. Although not required, it is suggested that at least one student author be present during the competition in order to answer questions from interested observers.

III. Judging

Judging criteria are based solely on the content of the poster. The authors may be present during the judging, but only to answer questions posed by the judges. The authors shall not make a formal presentation. Judges will consider questions such as:

- Is the poster original and creative? Does it relate to the competition theme?
- Is the presentation appealing? Does it pique the interest of the audience?
- Is the overall design easy to follow, and does it convey the information well?
- Does the poster address the questions it raises?
- Is the mathematical content at a sufficiently high level?
- Is the mathematical content presented clearly and correctly?

Posters should be original in nature. Sample ideas could be:

- An overview and analysis of the statistics from a recent election (local, state, or federal) or census. Or an analysis of economic data over a period of time. There is a wealth of public data available from governments at all levels that could be studied.
- An innovative solution to an interesting problem in which change, or rate of change, is essential.
• A clever application of a mathematical technique or tool which addresses change or rate of change.
• A statistical analysis of an interesting phenomenon showing change in some dimension (time, space, or other).
• An explanation of the connections between mathematics and another discipline (e.g. business, art, archeology, music, auto racing, cattle breeding).
• A new mathematical result.
• An old result presented in a new way, such as a new proof of an old theorem (e.g. Fermat’s Last Theorem).

IV. Prizes

In each of Categories I, II, and III cash prizes will be awarded to the 1st, 2nd, and 3rd place teams, to be divided equally among the team members.

1st place – $200
2nd place – $100
3rd place – $50

Additional Information:

There are many public sources of data to study. Just from the U.S. Government:

• Data.gov: http://www.data.gov/
• U.S. Census: http://www.census.gov/
• Tennessee data: http://www.tn.gov/

Ideas for presentations may be found on the web at sites like www.nctm.org, www.maa.org, as well as less obvious sites like www.naturalhistorymag.com and www.smithsonianmagazine.com.

For hints on creating a high-quality poster presentation, and to see some example posters, you may visit sites like:

http://www.ncsu.edu/project/posters/NewSite/
http://www.lib.uct.ac.za/infolit/poster.htm

As always, you may find that a search of the web via a site like Google with keywords like “poster presentations” will return many useful links.