What is the format of the final report?

The main body of the final project report should be a typed document of **at most** 10 pages in length, excluding any figures or tables. Use 12-point font and single spacing. It should include any relevant graphical and tabular displays either within the text or in an appendix (no restriction on appendix length). Formal bibliographic references are required. See the end of this handout for guidelines on paper organization.

How will the project be graded?

The criteria that we will use to grade the report include:

- Consistency: Did you fulfill the goals of the project and thoroughly answer the client's questions?
- Clarity: Is it easy for your client to understand what you did, the arguments you made, and the results of your analysis?
- Relevancy: Did you use statistical techniques wisely when addressing your questions?
- Writing: The project also will be graded on quality of writing.

Some suggestions for scoring highly on these criteria, and suggestions to keep in mind whenever you write anything, include the following:

- Know your audience. In this case, you should be writing for your clients. You may want to
 have others in the class read your report to make sure that they understand what you are
 doing.
- State the problem that you will tackle up front, specifying the questions to be answered and the goals of the project. The statistical methods considered should be driven the questions to be answered.
- Most importantly, talk to your professors for advice. You can and should discuss with the instructors the suitability of your methods and analyses.
- Be selective with computer output to help clarity.

What are the guidelines for paper organization?

Some guidelines are presented in the next few pages. The format of the guidelines provides a template for how you can organize the report. You can include the same sections.

Suggested Guidelines for Writing the Final Project Report

Executive Summary

The executive summary contains a brief account of your conclusion, it should be very short and to the point. Write the results not the description of the problem.

Introduction

In this section, get right to describing the main questions to be answered and the goals behind the consulting project taken on. You can put some relevant background information here, but don't spend too much space on it (that should go in the next section). You want just to give readers a taste of what's to come. Also, it's a good idea to summarize your conclusions in this section, so that clients will know what to look for as they read.

Background

This section should contain background information for your readers. This is used to paraphrase the problem you that you tackled, relevant issues present in the analysis that will be dealt with. Also, define any technical terms needed for the remainder of the paper. Don't include technical terms if you don't use them later. That hurts clarity.

This is the appropriate section for references related to the background of your problem and discussion of other, related analyses. That is, you can provide some information on authors that have addressed similar problems and how they went about finding a solution to them.

3 Data

Here you should describe how the data were collected; describe the variables used in the models; and, discuss issues such as missing data or confidentiality restrictions on the data. It's good practice to carry out a thoughtful exploratory analysis and provide a succinct description of the results stemming from it. That way, readers can get a handle on the type of data you're using, and it will help you uncover potential issues before deciding on the methodologies to use. Don't include the actual data in the report.

4 Methods

Here you describe the methodology/methodologies you considered in exploring the consulting project. Furthermore, you need to state upfront the assumptions that you are making.

5 Results

Here you describe the results obtained from the analyses performed. State your points or hypotheses and show the evidence you obtain in favor or against your hypotheses. Go point by point performing the corresponding tests and interpreting the results. Use tables and graphs that help give clarity to the results of your analysis, but be selective about which results you show, too much information can overwhelm the reader. If you have several graphs or large tables that are relevant put them in the appendix and refer to them in the text. While validating model assumptions should not be part of the main body of the report, it is an essential step, do your best validate the modeling assumptions, since these guarantee the validity of the conclusions you obtain, and results for this should be included in the appendix.

6 Conclusions and recommendations

In this section, you discuss the broad implications of your investigation. Explain what the results you obtained mean in terms of the questions the client posed and goals of the project. Be explicit about answering the consulting questions. Nonetheless, you can discuss issues that merit further exploration, interesting relationships among variables that are not quite central to answering the questions that might be things the client could look into. Importantly mention reservations about the analyses that you think may require more complex modeling, either due to modeling assumptions not holding, or by discoveries made along the process of analyzing the data that might hinder the validity of your conclusions.

7 References

Include all bibliographical references used here.