Writing About Operations Research - Overview

• A OR project report typically contains the following sections:

1. Introduction.

- What is the system that you are studying?
- What is the issue with the system you are studying?
- Why is it important or interesting?
- What is the decision or prediction problem you are trying to analyze?
- What operations research or statistical models did you use to analyze your problem?

2. Data.

- What information does your data contain? How big is your data?
- Where does your data come from?
- What does your data "look" like? (e.g., summary statistics, histograms)
- What are the relationships between the key variables in your data?

3. Model.

- What are the components of your model, both mathematically and in plain English?
- What assumptions about the system did you make in your model? Why?

4. Results.

- How did you run or solve your model?
- What software or programming language did you use?
- What model variants did you run, or what alternatives did you test?
- What were the results of your model, in tables, graphs, and plain English?
- What do the results mean in the context of your problem?
- Are there any interesting or surprising trends or trade-offs?

5. Conclusion.

- To summarize, what is your study about?
- What are the key takeaways from your results?
- What courses of action do you recommend, based on your study?
- What are the limitations of your study? What are some reasonable extensions of your study?
- Writing is an iterative and nonlinear process.
 - You probably won't get things right the first time around.
 - Your problem, data, model and results may evolve as you work on your project.
 - o This is natural! You can always go back and revise it.
 - Experienced analysts do this all the time.