

UNC School of Government

PRACTICAL ANALYTIC TECHNIQUES AGENDA

November 30, 2022

The aim behind analysis should be to provide insight to help shape the conversation and make decisions and not just to calculate the right numbers. In this class we will cover a number of practical techniques suitable for use in local government to help elevate our analysis. Class will include both discussion of techniques but also demonstrations for how to use Excel to implement these analyses.

Times listed are approximate. We will break for lunch about 12noon and there will be breaks during the day.

Sessions	Topics
9am to 11am Some Basics	<ol style="list-style-type: none">1. What's average?<ol style="list-style-type: none">a. Central Tendency – What is typicalb. Dispersion – What is the distribution?2. How do I understand variation?<ol style="list-style-type: none">a. The problem with common comparison strategiesb. Understanding variationc. Plot the dotsd. Process behavior charts for analysis3. Is there a relationship that helps explain variation?<ol style="list-style-type: none">a. Correlations and regression4. Can I forecast what the future might look like?<ol style="list-style-type: none">a. Straight line regressions for forecasting5. What needs to be random?
11am to 2pm (lunch) Do we have the right amount of resources?	<ol style="list-style-type: none">1. Work standards2. Staffing factor calculations3. UHUs4. Demand analysis5. Optimization
2-3pm What does it cost?	<ol style="list-style-type: none">1. Cost of risk2. Inflation3. Cost of capital4. Full cost accounting5. Go away costs6. Life cycle costs
3-4pm Thinking Analytically	<ol style="list-style-type: none">1. What if the assumptions or key variables change?<ol style="list-style-type: none">a. Basic Sensitivity Analysisb. Excel What If Tools - Goal Seek, Data Tables, Scenarios2. Thinking analytically Case Study