Data Interpretation Discussion

Instructions: **Group A** discuss its project first and **Group B** helps them think about their data. Take 15-30 minutes to discuss the first group's data; then switch roles and repeat the exercise to help the second group work through its data. The color coded text indicates which team leads each section.

- 1. Group A shares its data (2-4 minutes) Group A briefly shares with Group B the focus or purpose of collecting its data, what their interests were in the data, how the data were collected, and the initial impressions they have about the data.
- 2. Group B asks clarifying questions (1-2 minutes) To clarify their understanding of the data, Group B asks questions that have specific, factual answers, such as: For how long did you collect the data? How many data points did you work with? Which pollutants are you interested in?
- **3. Group B asks probing questions** (7-10 minutes) The group asks probing questions of the presenter. These questions are worded to help the presenter clarify and expand her or his thinking about what s/he is learning from the data. During this 10-minute time frame, the presenter may respond to the group's questions, but the group does not discuss the presenter's responses. Every member of the group poses at least one question of the presenter. *Example probing questions*:
 - A. What are some ways you might organize your data?
 - B. What might be some powerful ways to present your data?
 - C. Do you have any data that doesn't seem to fit? Any outliers?
 - D. Based on your data, what are you learning about air quality?
 - E. What is your data telling you about the area you researched?
 - F. What are the implications of your findings for the community?
 - G. What changes might you make in your study design based on your analyses of these data?
 - H. What new questions do you have?
- 4. Group B discusses the data analysis plan (4-6 minutes) Group B talks with each other about the data analysis presented, discussing such questions as: What did we hear? What didn't we hear that we think might be relevant? What assumptions seem to be operating? Does any data not seem to fit with the presenter's analysis? What might be some additional ways to look at the presenter's data? During this discussion, members of the group work to deepen the data analysis. During this part of the discussion, Group A does NOT speak, but listens and takes notes about what the other group members are saying.
- 5. Group A reflection (1-5 minutes) Group A reflects on what they heard and what they are now thinking, sharing with both their own group and Group B anything that particularly resonated for them during any part of the Group B data analysis discussion.

