

## City Essay: Suggested Outline

Tell your students to ask questions and take notes as you review the competition's suggested essay outline and discuss how they can use it to draft their essay.

### Part 1: The Introduction

Briefly introduce your future city by including the basic information about it. Include your city's name, how old it is, where it is, and how many people live there in the introduction.

### Part 2: A Closer Look

Paint a picture of life in your future city—as if you are describing it to someone who has never been there. Share details about:

- The climate and any natural features (like rivers, mountains, or a nearby ocean)
- Who lives in your city and what kind of work they do
- Any innovative or futuristic aspects of your city's infrastructure (such as housing, transportation, pollution control, etc.)
- What services your city provides (such as education, healthcare, etc.)
- Innovative ways your city is addressing resiliency (beyond the power grid, such as housing, transportation, healthcare, etc.)

### Part 3: Define the Problem

Describe the threat your selected natural disaster poses to your city. Explain:

- Which disaster you chose
- The short-term damages it creates and any potential lasting effects on your city and residents
- How would a traditional electric grid be disrupted by your chosen natural disaster? What are its vulnerabilities?
- The impact to the health and safety of the people in your city, including vulnerable populations (i.e., elderly, young, and/or economically-disadvantaged)

### Part 4: Describe Your Solutions

Here's where you get to describe the innovative design of your future city's power grid and how you've prepared it to withstand and recover from your selected disaster. Be sure to:

- Describe two innovative ways you have prepared your grid to withstand your selected disaster.
- Include an assessment of what conditions may cause these preparations to fail and how you would assess and repair the damage.
- Discuss the best- and worst-case scenarios for restoring power after the natural disaster.
- Share what aspects of your grid are futuristic and innovative.
- Describe some of the risks connected with using the solutions and how the solutions reduce these risks.
- Discuss the tradeoffs/compromises connected with your power grid and how your design reduces or eliminates these tradeoffs.
- Explain the types of engineering involved in designing your resilient city and what kinds of engineers were most helpful.

### Part 5: Conclusion

Share why people want to live in your city and what makes it a great place to live. Tie together the potential effects of a natural disaster and the need for a resilient power grid. Summarize how the design of your power grid will keep the people in your city safe and healthy.