**Zombie Apocalypse:**

**Indiana**

Just when we thought it was safe … another outbreak of the deadly Zombie Virus #372 has arisen. This time, it is in Indianapolis, Indiana, a metropolitan area of 1.5 million people. Indianapolis is known as the “crossroads of America” due to the high number of transportation routes traveling into and out-of the area. What does this mean for the Zombie Virus #372? The Virus will travel quickly to other cities and towns throughout the state and beyond. How can you protect your community? What types of natural and human resources does your community have available? What types of resources is your community lacking?

As it turns out, young people are our best resources (our most precious, anyway) for planning and implementing a Zombie Apocalypse defense!!! They have been playing Zombie video games, which many adults thought were bogus, but, obviously, these video games and the gamers’ experiences will be an asset to a communities’ defense and survival. It is up to you and your rogue friends to organize a plan as the adults are too busy freaking out!

Follow the instructions below in order to create your communities’ plans. Assign a recorder.

1) Where is your city located in relationship to Indianapolis? Label this on the Indiana road map at the front of the classroom.

2) As a group, look at the printed, aerial image of your community. What are your initial observations? Make a list of 6 (or more) observations:

3) Notice the latitude and longitude of your community. What is a line of latitude? What is a line of longitude?

4) Brainstorm about various resources that could help defend your community from a zombie take-over, and brainstorm about various resources that will help your community survive (live). Make a list for each.

Defense Survival

5) Visit the following website to find spatial data (maps) about the resources in your community: IndianaMap (<http://www.indianamap.org>). Make a list of the natural and human resources that could help your community: (for example, coal, acquifers, gymnasiums, medical facilities…)

6) Visit the Landsat image of your county: INView (<http://www.indianaview.org>). Do you observe any relationships between the Landsat image, the aerial image, and the INMap data? What benefits does the Landsat image provide your planning Team?

7) Create a rough sketch of your community on the newsprint using the markers OR using the Smart Board.

7) On the sketch, identify how you will defend your community. On the sketch, also, list the assets and liabilities of the area. Assets are human and natural resources that can be used to help. Liabilities are human and natural resources that may hinder defense and survival. Incorporate 8 assets AND 8 liabilities: be creative!

8) Tape the final sketch on the wall.

9) Share/present your group’s findings with other communities’ planners.

10) What are the overall results? List Indiana assets in general? List Indiana liabilities in general? Are there any possibilities in collaborating with other communities in the group to help each other?

11) Once the Zombie Virus #372 is eliminated and those infected are no longer, how should your community develop? How about all of the communities as a whole?

12) Think about realistic Indiana natural hazards (tornadoes, floods, earthquakes…) and global natural hazards (massive volcanic eruptions, meteors, earthquakes…). How does the planning for the Zombie Virus relate to planning for a natural hazard?

13) State 3 things that you have learned today:

 1.

 2.

 3.

 State 1 thing that you would like to know more about?

Instructional Review/Model:

1. Bloomington, Indiana; Monroe County; Latitude: 39° 9' 55" N, Longitude: -86° 31' 35" W

2. IndianaMap: (<http://www.indianamap.org>)

* Where is Bloomington located on the Indiana Map?
* View aerial image (orthophotography)
* Discuss initial observations
* Brainstorm defense & survival needs
* Research Bloomington’s assets and liabilities in relation to the defense & survival needs (hydrology, minerals, population, schools, medical facilities, police/fire facilities, agriculture…)
	+ List on the newsprint at the front of the classroom
* Discuss how to defend the City (considering assets and liabilities)
* Discuss how to survive (considering assets and liabilities)

3. View the Landsat imagery: INView (<http://www.indianaview.org>)

* Discuss initial observations
* Do you notice some relationships between the remote sensing image and the aerial image?
* How would a Landsat image assist in the detection of zombie activity?
* How would a Landsat image assist in the defense and survival of Bloomington?

4. Other possible spatial websites to utilize:

* Search for local GIS (Geographic Information Systems/Sciences) – Monroe County, GIS – to find local spatial data
* Search for a local *Emergency/Disaster Preparedness Plan* (Monroe County)
* Terra Server
* Google Earth (pretty imagery but not much data)