Introduction
The city of Bradford is located in McKean County in the Northern part of Pennsylvania. Founded in the early 1800s, Bradford was born out of conventional oil and other extractive industries. Today, the boom of oil has passed, and Bradford’s economy has suffered greatly. McKean County is currently classified by the Appalachian Regional Commission as having a transitional economy. By constructing a hiking and mountain biking trail that connects downtown Bradford to the Pitt Campus, the project hopes to connect the community, campus, and visitors to the scenic nature, heritage, and businesses in the region in order to create a sustainable economy in Bradford.

Community Partners
The success of the trail depends on community partners, yet the success of the trail also benefits community partners. From increasing real-world, hands-on learning opportunities for the students at Pitt-Bradford, to bringing tourism dollars to downtown core, this project will benefit the community. Some community partners include:
- Tuna Valley Trail Association
- Allegheny National Forest Visitors Bureau
- City of Bradford
- Penn Brad Oil Museum
- Just Riding Along Bike Shop
- Bradford Brew Station

GIS Mapping
Geographic Information System (GIS) technology brings important information for the construction of an accessible trail, such as the slope of the land. Detailed maps were created so that the research team can plot out a safe and effective trail across the land.

The trail will be a gradual walk up and down a beautiful scenic hill of Bradford, PA. Roads once used for oil and gas trucks carved a steady and reliable trail to converge the hill. Three (proposed) trail heads are available, each connecting and show the amazing landscape of the region.

Sustainability
A trail that is both functional and sustainable will meet the following criteria set by the National Park Service:
- Minimal impact to the area’s natural systems.
- Little soil loss or movement while allowing vegetation to inhabit the area.
- Does not adversely affect the area’s animal life.
- Accommodates existing use while allowing only appropriate future use.
- Requires little rerouting and minimal long-term maintenance.

To achieve this, the trail will be constructed with a grade less than half of the hill’s slope, around a 10 percent slope. Additional drainage will be added to minimize erosion.

Conclusion
The goal of the project is to connect the community, campus, and visitors to the scenic nature, heritage, and businesses in our region. Students have collected data and research to ensure that the trail is sustainable and safe, all while improving their technical skills. The partnerships and connections made through this project have the potential to grow and increase the prosperity of McKean County, enabling it to reach a sustainable economy.

Acknowledgements
National Park Service, Rocky Mountain Region, January 9999 (IMBA, 2019)